BUSINESS WEEK

The Coming Inflation Gap



W. Stuart Symington: Will NSRB benefit from World War II experience? (page 22)

AUG. 5, 1950



News of developments from General Electric's Chemical Department that can be important to your business.

G-E SILICONES FINDING NEW USE

Here's a new development in cosmetics for cars. Manufacturers are incorporating small quantities of General Electric silicone oils in auto waxes and polishes. They say the resultant products, when properly formulated, add desirable characteristics to the polishes. For example, "rainbow" streaks are eliminated; the polishes and waxes are much easier to apply; and sub-

sequent cleanings are simplified.

A silicone film forms on the surface of the wax or polish when applied, which users say gives added protection to the car finish and helps to keep it looking bright and shiny. Other similar applications for G-E silicones are anticipated, based on the remarkable characteristics of this amazing new chemical family.



There's a whole family of G-E silicone products which is finding an ever-widening range of uses in industry. A few of the more important ones are G-E silicone resins, oils and rubber. All are characterized by the chemical inertness, temperature-resistance, and flexibility of silicones. Why not write us today for more information on how these versatile materials can help you make better products more easily? Just address: Chemical Department, General Electric Co., I Plastics Ave., Pittsfield 18, Mass.

CHEMICAL BREVITIES

A recent G-E chemical development— G-E phenolic resin binder 12330 makes it practical to mold strong, for expensive trays, medallions—even boards—from impregnated sawdust.

General Electric's popular all-purpose insulating varnish is helping to simplify motor maintenance and reduce service shop inventory problems.

Resin-impregnated, plastics-laminated "inner door" panels are being made by G.E. for several large refrigerator manufacturers. They are lightweight, rustproof, exceptionally strong.



G-E Chemical Department plants at: Pittsfield, Mass.; Schenectady, N. Y.; Waterford, N. Y.; Coshocton, Ohio; Decatur, Ill.;

Taunton, Mass.; Anaheim, Calif.

GENERAL ELECTRIC





he telephone takes a smaller part of the family budget than in 1939...

One of the attractive and remarkable things about telephone service is its low price.

It actually takes a smaller part of the family budget than it did ten or eleven years ago. That's because the average family income has increased much more than the increase in telephone rates. Even though increases in telephone rates are still needed to catch up with past increases in costs, your telephone will continue to be a big bargain. The increases so far, plus those now requested, average only a penny or so per call.

At the same time, there has been a big increase in the value of the telephone. On the average, you can now call more than twice as many telephones in your local area as in 1939.

BELL TELEPHONE SYSTEM



Budd Introduces New Lightweight Wheel of STEEL

This new high tensile steel wheel for trucks and trailers is completely interchangeable with standard wheels, requires no special parts, provides all Budd wheel features including dependable strength, and saves approximately 20 pounds over present Budd wheels. . . more over others. Inner duals are readily inspected and serviced. Available as specified factory equipment and through all Budd wheel distributors.

The Budd Company, Detroit 14.





WHEN IT "PANS OUT" that a product can be taught to count to the greater benefit of its users . . . then, by the same token, it will count to the greater profit of its maker.

Witness the case of the martafacturer of electrical equipment who . . . in a hotly

competitive market . . . built a Veeder-Root Counter into his product to record the number of times that product was push-buttoned into service by its users. And so he proved his service guarantee beyond argument or doubt . . . while his competitors were still hurling words. instead of Facts-in-Figures.

Now . . . what about looking for new pay-dirt in your product?

Small Reset Counter, built into many products to count strokes or turns. For picture of complete line of mechanical and electrical counters, write for free 8-page "Count Book" below.



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VEEDER-ROOT INC., HARTFORD 2, CONN.

In Canada: Veeder-Root of Canada, Ltd., 955 St. James Street, Montreal 3. In Great Britain: Veeder-Root Ltd., Kilspindie Road, Dundee, Scotland.



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WIREMAKER

FOR

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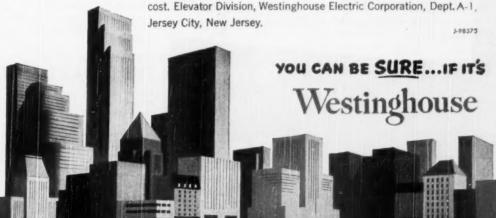
NEW
SOUND MOTION PICTURE
TELLS COMPLETE STORY
OF THE NEW ERA
FOR ELEVATORS

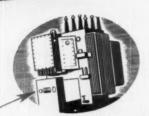
See and hear how SELECTOMATIC solves any elevator traffic problem instantly and automatically . . .

What kind of an elevator traffic condition gives you the most trouble? Incoming rushes? . . . outgoing surges? . . . intermittent traffic demand in either direction? . . . or a combination of all three? Whatever it is, Westinghouse Selectomatic will solve it instantly and automatically. Selectomatic is the unique "electrical brain" that matches calls, cars, and floors under all traffic conditions and reduces waiting time in some cases as much as 50%.

But, even a series of advertisements cannot illustrate all the benefits of Selectomatic. To dramatize the complete story of this ingenious electrical brain, Westinghouse has produced the 26-minute sound motion picture "Speeding Vertical Transportation with Selectomatic Elevators." See and hear the complete story of Westinghouse Selectomatic.

Write on your letterhead and we will gladly arrange a showing at your convenience at no





Remote-Reading Thermometer solves problem for Electrical Engineer

THE clear, evenly calibrated dial of an Auto-Lite Remote-Reading Thermometer may be located without regard to the position of the actuating mechanism. A capillary tube connects the two parts so readings can be made at convenient connects the two parts to reducing can be indee at convenient eye level. Preset clarm contacts can be provided for controlling fans or sounding an alarm when transformer temperature reaches a critical stage. Again, the eye-level location makes it easy to check the alarm device, an advantage particularly important on outdoor sub-station installations during icy weather. Auto-Lite Remote-Reading Transformer Thermometers are available through all manufacturers of power transformers in

a wide variety of types to meet all job requirements. The Electric Auto-Lite Company has been manufacturing indus-

trial thermometers for over 30 years and has developed many special dial and recording type thermometers for special requirements. If you have an application requiring accurate temperature indication, Auto-Lite can design an instrument for your use at low cost, You are invited to write to:

THE ELECTRIC AUTO-LITE COMPANY

Toledo 1, Ohio

Hew York: Chrysler Building Chicago: 600 S. Michigan Av

Auto-Lite Remote-Reading Thermometer with capillary tube for remote reading



Highlights In This Issue

Allocations Are Coming

· BUSINESS WEEK SURVEY finds many prices rising, some manufacturers already allocating scarce goods.

World War II Controls

· The pattern last time probably won't be followed again. But a look at 1940-1944 gives some clues to the tough job NSRB Chairman Stuart Symington now

Timesaver: Two-Way Radio

· Mobile radio is moving into new fields and building an impressive record of time and cost saving.

TV Plugs Milk

· With sales lagging, milk producers open a nationwide campaign to boost milk drinking.

Rail Outlook Is Brighter

· With even partial mobilization, rail traffic will rise. That will mean more revenue. Heavy capital investment will be some protection against excess-profits

Average Wage Is Rising

· Canceled vacations mean pay bonuses for war plant workers. And new overtime schedules are equivalent to a widespread pay hike.

A Louder Voice of America

• State Dept. probably will get the extra money that it needs now to mount a strong counterattack against Russia's propaganda.

THE DEPARTMENTS

Business Abroad	89
Business Outlook	9
Construction	51
Finance	69
International Outlook	87
Labor	78
Marketing	54
The Markets	76
New Products	45
Production	38
Taxes	64
The Trend	96
Washington Outlook	15
Weather	28



Why "Cordura" Rayon is right for so many products

I WAS the right yarn to make conveyor belts thinner, yet tougher. The right yarn to take the "stretch" out of V-Belts. The right yarn to make hoses 50% stronger without increasing weight. It's Du Pont Cordura* High Tenacity Rayon, the man-made fiber that gives you high strength at low cost.

Inherently stronger than natural yarns commonly used, "Cordura" is made in continuous filaments with no short pieces to pull apart under strain. What's more, it is absolutely uniform... no weak spots in the yarn.

That's why "Cordura" Rayon is right for so many different products. That's why it may be just the right yarn to help you improve your product or bring a new one into production.



WRITE NOW for the new reference manual, "Sinews for Industry." It gives physical properties of "Cordura"... tells you how Du Pont will help you henefit from the advantages of "Cordura" Rayon. Address Rayon Division, Room 4421, E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware.

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Du Pont "Cordura" High Tenacity Rayon-for high strength at low cost

for RAYON ... for NYLON ... for FIBERS to come ... look to DU PONT



EVEN A CAP CAN BE TOP-HAT

To most folks, a bottle cap is just something to be flipped off in a hurry when you've got a thirst. But, to the scientists who work day in and day out to make Bond Crowns better and better, the cap that protects your beverage is mighty important.

In recent months, these scientists have made important improvements in the methods by which the metal is stamped and the liner fastened in place. Their research has helped produce a continuous lacquering process and a varnish that can be baked at higher temperatures for increased resistance to corrosion-inviting scratches.

This particular specialized research has given bottlers and brewers an improved seal to protect the flavor and quality of beverages. However, the work of Continental technologists covers a wide range of packaging problems. No matter what you pack-or whether you now put it in a bottle, can, paper container, steel or fibre drum-Continental has the background and knowledge to give you top-hat service. Remember, if you have a packaging problem-it's our baby!



CONTINENTAL (C. CAN COMPANY

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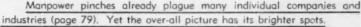


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MAKERS OF: Tin Cans · Fibre Drums · Paper Containers · Steel Containers · Plastic
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BUSINESS OUTLOOK

BUSINESS WEEK AUGUST 5, 1950



For one thing, there are a lot more civilian workers now than before or during the last war. The labor force averaged 55.6 million in 1940. By 1944, five-million additional women had been attracted to jobs—but the male work force had been cut six million, net, by the armed forces.

So, in 1944, the labor force averaged only 541/2 million.

By 1948, it had grown to nearly $61\frac{1}{2}$ million. So far this year, it has averaged close to $62\frac{1}{2}$ million.

Mobilization won't reduce workers' numbers much this year. In fact, calls to the colors won't much more than balance natural growth of the labor force. "Emergency workers" seeking jobs will be a net gain.

Hiring extra workers will be much easier than getting needed skills.

Manufacturers can expect to draw on women, people who have retired, workers in lines where pay is relatively low. Then, too, there are about a million workers on part time now who want full-time jobs.

But these sources involve up-grading all along the line. This means special in-plant training to create needed skills. It's expensive.

Most employers, before they go out to tap new pools of labor, will get more out of the people they have. The simplest way is overtime.

The work week in manufacturing, for the first time since early 1948, now has been pushed a shade above 40 hours (page 78).

Overtime, indirectly, will swell the labor force. Workers leave their old jobs, attracted by fattened pay envelopes elsewhere. This, in turn, leaves slots for people who otherwise wouldn't even hunt jobs.

Women probably won't come into the labor force to the extent they did from 1940 to 1944. The patriotic urge isn't yet as strong as it was then. Moreover, the high rate of marriages and births ties many down.

Judged off the cold statistics, however, a lot of women are available. There now are about 38 million "not in the labor force"—that is, not working or looking for work. There were 36 million in 1940.

* From 1940 to 1944, the pool of womanpower provided five million added workers. But women in jobs still average four million over 1940 now.

In that time, the number of males in the labor force has grown only 2.6 million. Thus the ratio of women to men now is very high.

Two pools of labor that were bountiful in 1940 won't yield much now:

Farmers—Farm employment dropped about a million from 1940 to 1945 (despite record output). Industry got many of these workers. But farm employment now isn't much above the 1945 low; machines replaced hands.

Unemployed—The jobless numbered eight million in 1940. This was drawn down to a low of 440,000 late in 1943. But unemployment in July of this year was down to 3.2 million; that's not much slack.

People over 65 can contribute to total manpower in skills more than in actual numbers.

About 200,000 women and 500,000 men over 65 entered the labor force between 1940 and 1945. Today, over-65 employment is running nearly



BUSINESS OUTLOOK (Continued)

BUSINESS WEEK AUGUST 5, 1950 3.1 million against 21/4 million a decade ago. This figures out to about a 38% increase in oldsters on the job.

This tops the gain in over-65 population—rapid as that has been. Our population over 65 (noninstitutional) is up 30% in the decade.

"Easy" labor-market areas rapidly are becoming fewer and fewer.

Last March, there were 42 areas with unemployment of 12% or more.

These "E" areas were cut to 31 by the end of May, to 22 in June.

At the same time, insured unemployment is below $1\frac{1}{2}$ million—or only a little higher than it was at this time in booming 1948.

And total unemployment, at last count, was only 3.2 million.

August figures, barring flukes, should show more than 62-million people working—a new record—and about three million unemployed.

Only a fluke prevented a new high for July employment. The Census Bureau took its sample in a rainy week. As a result, farm employment dropped 600,000 from June—instead of holding even or rising.

That made the difference. For nonfarm employment rose to 523/4 million, up 350,000 from June and the highest ever.

Incidentally, today's nonfarm employment stands out over the 1943-44 peak wartime production when employment was level at 45 million.

Factories can use a lot more manpower—if materials can be had.

Employment in manufacturing last month was under 14.7 million. That is more than three million below the peak level of World War II.

But where the extra workers would come from is another matter.

Perhaps from trade, where employment, at 9.4 million, tops wartime levels by two million. Or construction with twice as many workers.

But not by cutbacks on output. That just transfers workers from one factory to another; it doesn't boost total manufacturing employment.

Makers of aircraft and aircraft parts will be after a lot of workers—and they will raid other factories. Official figures put aircraft employment under 200,000 now—less than a tenth of the wartime high.

Scare buying at retail should have passed its peak by now. Department store sales averaged 50% above a year ago in the last half of July. That can't go on for long; stocks would run out.

Then, too, there are other brakes: (1) Hoarders should be about "bought up" by now, and (2) there's a matter of a) money, or b) credit necessary to sustain any such buying boom.

In fact, Paul S. Willis, head of the Grocery Manufacturers of America, Inc., says buying of certain items "has subsided considerably."

Consumer credit figures invite Washington to slap on the controls.

The July total undoubtedly will top \$20-billion. That's about double the pre-World War II peak. And, while our economy is a lot bigger, \$20-billion is enough to worry even those who view such credit calmly.

Consumer credit went up \$550-million in June to hit \$19.6-billion. Instalment balances made up nearly \$12.4-billion of the total.

Kimpak Float Packaging

Cuts shipping costs –
reduces damage in transit!

Last year, dozens of manufacturers of furniture and other products revised and streamlined their packaging operations based on facts and figures about KIMPAK* Float Packaging. They found, through actual comparison, that KIMPAK offered more economical, more dependable packaging protection. And because there is a specification of KIMPAK for every cushioning need, these facts may apply to your packaging operation as well:

 KIMPAK creped wadding, in rolls or sheets, is as easy to apply as wrapping paper. It saves literally hours in the shipping room,

 KIMPAK is clean and free from damaging foreign matter; will not scratch, rub or pressmark delicate finishes. It's pleasant to handle. KIMPAK is a highly efficient cushioning material—made especially to absorb continuous vibration and severe shocks, defend against roughest handling. Its "springy" resiliency provides short packaging—the world's most effective shipping protection.

POSTER BED

 KIMPAK is the neatest, most attractive cushioning for your product. It's fresh-looking both before and after using—completely eliminates litter and mess in unpacking.

Today, won't you investigate KIMPAK Float Packaging, and compare it with your present methods? For immediate detailed information, contact the KIMPAK distributor listed in your classified phone directory under "Packing Materials" or "Packing Materials—Shipping", or write to Kimberly-Clark Corp., Neenah, Wis.



1. Sheets of correct dimension are easily cut from rolls of KIM-PAK. No waste.



2. All finished surfaces of head and foot pieces are completely protected by KIMPAK.



3. As each KIMPAK sheet is applied it is firmly attached by stapling, taping or tying.



 Final KIMPAK-wrapped package is now ready for loading into full freight car, eliminating any further packaging protection.

All photographs courtesy of New Orleans Furniture Manufacturing Co.

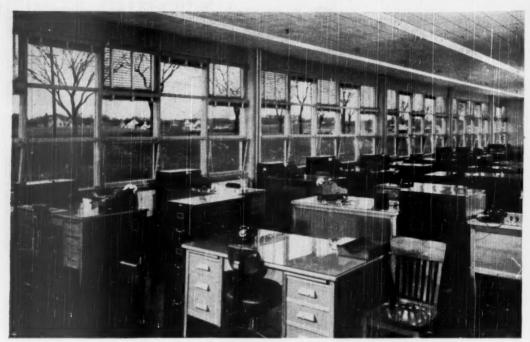
VISIT OUR BOOTH NO. 801 AT THE WESTERN PACKAGING AND MATERIALS HANDLING EXPOSITION CIVIC AUDITORIUM, SAN FRANCISCO, CALIF., AUGUST 16-18





- FREE BOOKLET-

T. M. REG. U. S. PAT. OFF.



National Tea Co. at Minneapolis, walled the office of its new one-story warehouse with Themphan insulating glass. It enables employes to be seated close to these windows without disconfort even during Minnesota winters. Architects: Magney, Tustler & Setter, Minneapolis.

HOW TO GET

COMFORTABLE USE OF SPACE NEAR WINDOWS

There's a lot of employe good will as well as operating economy in a wall that lets in plenty of daylight. *Thermopane** insulating glass makes this practical. Composed of two panes of glass with dry air sealed between, it has approximately the same thermal insulating value as a twelve-inch brick and concrete wall.

This means that in any building you may be planning, regardless of purpose, you can specify *Thermopane* for maximum natural daylighting and maximum use of floor space. You will be able to locate desks close to the window without fear of discomfort to employes in winter. You won't require extra heating capacity to compensate for downdrafts near the large window area. Airconditioning units can be smaller and less expensive since *Thermopane* insulates against heat, too,

When walls are *Thermopane*, costs of exterior construction, finishing and decorating are eliminated. On a square foot basis, you'll find it an economical wall to build. For details, write for our *Thermopane* literature.

FOR BETTER VISION SPECIFY THERMOPANE





Thermopane

MADE ONLY BY LIBBEY-OWENS-FORD GLASS COMPANY
5785 Nicholas Building, Toledo 3, Ohio

FIGURES OF THE WEEK

1923 - 25 = 100	i pr		1923	- 25 = 1	00
240					230
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1740 1747 1748 1747 1750			1950		
	§ Latest Week	Preceding Week	Month Age	Yeor Ago	1941 Average
Business Week Index (above)	. "220.2	†220.0	217.5	181.2	162.2
PRODUCTION					
Steel ingot operations (% of capacity)	101.7	99.3	92.6	81.3	97.3
Production of automobiles and trucks	194,828		196,767		
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)	\$50,870		\$45,025		
Electric power output (million kilowatt-hours)	6,190		6,115		
Crude oil and condensate (daily average, 1,000 bbls.) Bituminous coal (daily average, 1,000 tons)	5,522 1,868	5,538 +1,519	5,435 1,770	4,731 1,213	
	2,000	149000	4,770	-,	4,000
TRADE	-				
Miscellaneous and l.c.l. carloadings (daily average, 1,000 cars)	76 57	74 57	77 58	68 52	86 52
All other carloadings (daily average, 1,000 cars)	\$26,915	\$27,029	\$27,026	\$27,333	\$9,613
Department store sales (change from same week of preceding year)	+46%	1+25%	+1%	-10%	+17%
Business failures (Dun & Bradstreet, number)	160	170	156	168	228
DDICES (A					
PRICES (Average for the week) Cost of Living (U. S. Bureau of Labor Statistics, 1935-1939 = 100), June. 170.2			168.6	169.5	105.2
Spot commodity index (Moody's, Dec. 31, 1931 = 100).	450.0	444.2	408.0	341.7	108.1
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)	271.3	262.9	242.5	213.9	138.5
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)	355.0	352.6	335.7	295.4	146.6
Finished steel composite (Iron Age, Ib.)	3.837é	3.837€	3.837∉	3.705€	2.396¢
Scrap steel composite (Iron Age, ton)	\$37.33	\$36.83	\$37.67	\$19.92	\$19.48
Copper (electrolytic, Connecticut Valley, lb.)	22.500e	22.500e	22.500€	17.625¢	12.022¢
Wheat (No. 2, hard winter, Kansas City, bu.)	\$2.29	\$2.27	\$2.17	\$2.05	\$0.99
Sugar (raw, delivered New York, lb.)	6.20¢ 38.53¢	6.17¢ 38.25¢	5.86¢ 34.09¢	5.85e	3.38€
Cotton (middling, ten designated markets, lb.)	\$2.50	\$2.50	\$2.33	31.53e \$2.05	13.94¢ \$1.41
Rubber (ribbed smoked sheets, New York, lb.)	50.10e	42.83¢	31.44e	16.40e	22.16¢
FINANCE	141.5	140.5	* ***	****	
90 stocks, price index (Standard & Poor's Corp.) Medium grade corporate bond vield (Baa issues, Moody's)	141.3 3.28%	138.5 3.30%	140.1 3,33%	119.9	78.0
High grade corporate bond yield (Aaa issues, Moody's)	2.63%	2.65%	2.64%	3,44%	4.33%
Call loans renewal rate, N. Y. Stock Exchange (daily average)	14-11%	14-13%	14-11%	14-13%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	14-11%	11-11%	14-13%	14-11%	4-1%
BANKING (Millions of dollars)					
Demand deposits adjusted, reporting member banks	48,466	47,728	47 072	46 603	
Total loans and investments, reporting member banks	68,028	67,875	47,972 67,960	46,683 63,458	††27,777 ††32,309
Commercial and agricultural loans, reporting member banks	13,911	13,791	13,602	12,891	116,963
Securities loans, reporting member banks	2,673	2,295	2,369	2,006	111,038
U. S. gov't and gov't guaranteed obligations held, reporting member banks	35,727	36,222	36,638		1115,999
Other securities held, reporting member banks	5,949	5,958	5,738	4,837	++4,303
Excess reserves, all member banks	850	670	520	900	5,290
Total federal reserve credit outstanding	18,636	18,475	18,567	19,075	2,265
Preliminary, week ended July 29,	(Date	for "Latest	Week" on	each series o	m request.
AAE 45 - 4 - 7000 1 - 12042 - 171					

+Revised.

++Estimate (BW-Jul.12'47,p16).





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LONGEST UNDERSEA TRIP ENDS. U.S. N. guppy-snorkel submarine Pickerel completes 21-day, 5200-mile submerged cruise from Hong Kong to Pearl Harbor. On this and many other U.S. Navy vessels, Exide Batteries servimany vital needs. (Official Inst. of Defease Photograph)



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WASHINGTON OUTLOOK

WASHINGTON BUREAU AUG. 5, 1950



You can expect economic controls to be put on faster and go further, now that the "all-outers" are getting the upper hand.

The big push is for a return of all the wartime powers. That would put the government in position to direct everything. Motives behind it are mixed and should be understood, for they will influence major decisions.

It's partly an effort to get defense going faster, rush arms output, even if this does mean pinching the civilian economy hard and soon. It's a reflection of rising anxiety over Korea and Russia's intentions.

There's politics in it, too. Neither political party wants wage-price control and rationing now. But each fears it will be blamed in November if prices keep climbing, so both are inclined to give Truman the power.

The defense program is snowballing, becoming bigger and bigger. It might be trimmed, after Korea and if Russia behaves. But officials insist now that a cut isn't likely. A few statistics, to help on perspective:

- Before Korea, near \$15-billion for defense—\$13-billion for our own forces, \$1.2-billion for our allies and \$700-million for stockpiling.
- Two weeks ago, \$27.5-billion—\$10.5-billion more for the military and \$2-billion to be used in financing production expansions.
- Now, \$33-billion—\$4-billion added on for more aid to allies, \$900-million for Navy aircraft and an extra \$600-million for stockpiling.
 - In the future, \$25-to-\$30-billion yearly to keep defenses up.

The immediate increase comes to \$18-billion. That's a big order in an already tight economy, especially when over half of it is for "hardware"—planes, tanks, guns, etc., which lap up metals.

Arms production will be expanded rapidly "as fast as we can do it, without creating unemployment and waste which would go with a sudden, all-out war effort." Actual cash spending won't show a big rise in the next 12 months. But most of the extra money will be committed, and it is the ordering which will put pressure on materials and prices.

The defense boom will run two to three years, assuming no big war. Truman's military and economic advisers figure it will take that long for production to expand enough to supply the extra for arms and at the same time fill all the demands of a rising economy—that long for the economy to become comfortable again.

The plan is to keep controls on for the duration of the boom. The earliest date to expect a "free economy" again, barring an unexpected settlement of U.S.-Russian relations, is 1952. Truman probably will be running for reelection then. You recall that he lost Congress in 1946, when he held onto wartime controls after popular support had died.

Control of materials will begin this month, gradually at first, then spreading and becoming tighter in the fall and winter.

Natural rubber may be first. The plan is to restrict its use and set the government up once again as the exclusive importer.

Metals will be next, with the sharpest cut probably coming in copper

WASHINGTON OUTLOOK (Continued)

WASHINGTON BUREAU AUG. 5, 1950 for nondefense use. Inventory restrictions are going to limit stocks.

Cuts in civilian production will be gradual, to avoid unemployment.

Consumer credit controls by September are the prospect. Plans aren't firm. But indications are that the Reserve Board will follow the lines of wartime regulation "W" on major instalment items: autos and appliances.

Selective price ceilings by October are likely, unless the up-trend levels out. Living costs, led by food, are rising at an estimated rate of 1% per month. That sharp rise, if unchecked, will bring on a real wage-price spiral.

Wage ceilings will be necessary to make price ceilings stick. They will be cushioned though with adjustments to take care of living cost increases.

A plan to censor news is being shaped up, but officials say there is no intention to use it unless the Korean war spreads. There is a tightening up, however, on government information. The Federal Power Commission, for example, is classifying its maps showing locations of gas and electric utilities as "restricted." Many military orders will not be announced.

Excess profits tax: There is a rising clamor in Congress to vote it now as a part of the bill upping rates on corporation and individual incomes. But chances still are that it will be delayed until next year.

Accelerated depreciation: Any excess-profits tax probably will permit a rapid write-off of plant and equipment outlays certified for defense.

Capital gains: The short holding period and low rate are regarded by many government tax men as a speculative loophole. So you can expect an effort to tighten up the law, effective no later than next Jan. 1.

Companies expanding to produce defense material will be able to get government financial aid, both direct loans and guaranteed bank loans. Plans probably will be ready in 30 days.

Small business will get a share of defense orders. But many of them will find it easier to get subcontracts from the big arms producers than direct contracts from the government. You can get a list of the top 100 contractors in World War II (page 25). It will give you some guidance on where the bulk of military orders will go this time.

Who will say what the civilian economy produces is a bitter issue within the Administration.

Symington of NSRB will say how much of a share military defense gets. But he also wants to say how the civilian share is to be split up. Example: steel, as between washing machines and wastebaskets.

Sawyer of Commerce wants that job. Otherwise, Commerce merely will pass out priority and allocation slips as instructed by NSRB.

Truman will settle the row—rule whether businessmen deal with NSRB, a planning agency, or Commerce, which is their contact with the government.

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BUSINESS WEEK

NUMBER 1092 AUGUST 5, 1950

The Sellers' Market Is Back Again

- First there was a boom—and you began to see signs that demand for goods was running ahead of production.
- Then came Korea. And now the mere prospect of big military buying has started a panic scramble—before a dime of the new, money is spent.
- Manufacturers have boosted the price on a long list of products.
- More and more suppliers are putting scarce items under voluntary allocation to protect old customers.
- · Ahead: A \$30-billion gap between supply and demand.

The Army hasn't yet spent a dime of Truman's extra \$10-billion for the Korean crisis. But U.S. business is already living in something that feels very much like a wartime climate.

Price after price is going up. More and more products are becoming hard to get. More and more manufacturers are distributing to established customers through informal allocations.

"It's 1941 all over again," say businessmen who remember the early years of World War II.

•Sellers' Market-All this has happened so suddenly that a lot of businessmen haven't had time to figure out what hit them. But the explanation is simple: The Korean crisis came at a time when the U.S. economy was already running at close to top speed. The prospect of a big new military program piled on top of record civilian demand has wrecked the delicate balance of inflationary and deflationary forces. The buyers' market of 1949 and early 1950 has vanished. The seller is in the saddle again. The supply of goods isn't big enough to soak up all the demand.

Raw materials were hit first. But price rises and shortages are spreading fast into finished goods.

A BUSINESS WEEK SURVEY of manufacturers all over the country this week shows that the twin signs of inflation—price increases and allocations—are cropping up almost everywhere. In many cases, manufacturers report that supplies were getting tight even before Korea.

• Steel, Components-For instance, Apex Electrical Mfg. Co., Cleveland, recently hiked the price on its washing machines. It is paying premium prices for steel because it can't get a regular contract with a mill in the present market. And the extra cost shows up in the new price list. Apex is now rationing its dealers on all its products except vacuum cleaners. It can't get enough materials to give the dealers all they want.

In Ohio, a big manufacturer of construction machinery is now analysing his costs, preparing for a price hike. His trouble is increasing cost of components. The company is now allocating truck mixers and plans to allocate building mixers, compressors, and pumps because "the plant cannot possibly produce enough to satisfy the demand".

Koppers Co., Pittsburgh, has started allocating scarce products (mostly plastics) to its customers on the basis of their purchases during 1949. "This practice," says Koppers, "will be applied to other products which become scarce so that old customers may be assured of fair and impartial treatment."

Prices of electrical industrial equipment are climbing fast. Westinghouse has hiked price tags 7% to 10% on half its line. Many smaller manufacturers have made even bigger markups. Rising prices for copper, steel, and other materials are the reason.

• Not Absorbing—Most of the manufacturers who are raising prices now cite cost increases as the explanation. But some of them add that they couldn't have passed these extra costs along to the customers in the highly competitive markets of 1949. The new sellers' market has opened the way for a lot of price boosts that manufacturers would have otherwise absorbed. And, of course, once the price-raising process gets started, it feeds on itself. One man's product is the next man's raw material.

There's another reason for sudden price jumps in some lines. A good many manufacturers say privately that they think government price control is coming soon. And they want to get prices high enough to allow them a little elbowroom when the freeze comes. A 5% cushion in your margin can make the difference between turning a nice profit and going broke when you are working under price ceilings.

One of the top executives of a big midwestern company, a former OPA official himself, says, "If you could get real chummy with most manufacturers, I think you'd find that they're afraid of another OPA. If there's to be a price freeze, they want to be sure their prices are high enough, because they know OPA is slow to recognize any increase in costs."

Could Be Higher—But the rapid spread of informal allocations systems points to a significant fact. Business isn't raising its prices anywhere near as much as it could in the present market.

If you hike your price enough, you don't need allocations. The price rise knocks off your marginal customers and balances demand with supply at the new level. It's only when your price is lower than the market theoretically would pay that you have to parcel out your product by allocations.

• Boom Plus Fright—Part of the demand today is natural. With the U.S. economy operating close to capacity, you can expect it to chew up tremendous quantities of raw materials and components. And with consumers pulling down record incomes, you can expect them to splurge on appliances, automobiles, furniture, and other hard goods.

But since Korea, there's been a big new element in demand—scare buying by individuals and businesses alike. Consumers have hustled out to buy hard goods while they can still get them. Businessmen who were working on a bare-bones inventory are trying desperately to get a little more steel or a little more copper in their warehouses. Retailers and wholesalers are trying to build up a backlog before the produc-

tion cutbacks come.

Even before Korea, business generally was trying to build inventories. It had cut down too drastically in the 1949 inventory recession. Now the prospect of shortages puts extra urgency into the situation.

 Gap Ahead?—But we are still only smelling the cork. We haven't yet had a real drink out of the bottle. That will come when the big military spending

starts.

Government economists take a soothing line-officially. But even they will say that buying power is fast outrunning production. Once again, they are talking in terms of an old World War II con-

cept-the "inflation gap."

The inflation gap arises whenever the amount of money that government, business, and consumers are trying to spend exceeds the value of the goods available for purchase at current prices. And in wartime, this almost always happens.

When there is a big munitions program, a large part of the economy goes to work on military goods. These goods aren't available for civilian use, but the workers who make them have to be paid. Hence, purchasing power runs far ahead of the supply of goods—unless taxes take up all the difference.

• \$30-Billion—Looking ahead to the end of 1950 and the start of 1951, economists can see an inflation gap of perhaps \$30-billion a year opening up. That's enough to put tremendous upward pressure on prices, even though total output of goods and services is now running around \$270-billion.

Here's how the figures stack up:

At the moment, the military is spending at the rate of about \$4-billion a year for hardware—planes, tanks, and similar items. By the end of 1950, the spending rate should be somewhere around \$8-billion, and by mid-1951, it will be larger yet. In addition, there will be increased foreign aid and more money for military housekeeping and the like.

At the same time, civilian demand will be increasing. Consumer buying is sure to stay high, even when the first rush of panic demand subsides. Business will step up its investment plans, trying to get extra capacity installed while it can. And business will try hard to build up its inventories. All in all, economists think a jump of \$20-billion or so in civilian demand is a fair bet.

That gap between demand and supply is beginning to open up under our feet now. Production will rise, of course, but we are already too close to the limit on output to manage an increase big enough to take care of that big a junp in demand.

Limited Profits

New law in the works will make practically all government contracts subject to renegotiation. Rules remain the same.

You can take it for granted that just about any contract you make with the government from now on will be renegotiable. That is, the government will reserve the right to set a limit on your profit from defense business.

• Bid Contracts, Too—There's a bill before the House Ways & Means Committee now that would make all contracts—both bid and negotiated—subject to profit-limiting renegotiation. What's more, it would cover any contracts let by the General Services Administration—which does most federal nonmilitary burning.

Actually, this bill copies almost word for word the law on contracts that business lived under during World War II. In one section, it even uses the old term "war effort" instead of today's "defense effort." Congress will change that—but probably not much else. The bill

should pass this year.

But even without a general renegotiation law, most government business would be subject to profit control. The 1951 Appropriations Act and most of the previous military appropriations bills specifically provide for it.

There are two main points in the present system of renegotiation that businessmen should know about: (1) what contracts are subject to renegotiation; and (2) how much profit the government will allow you to keep.

• Who's Subject—The act says that if you do over \$100,000 worth of business a year with the government, your contracts can be renegotiated. But in figuring your total business with the government, you can leave out any contracts of less than \$1,000. If you don't do at least \$100,000 worth of business a year (not counting contracts under \$1,000), you're not subject to renegotiation—no matter how many contracts you have or how big these contracts are.

Only negotiated contracts are subject to renegotiation under present law; bid contracts are now exempt though the new bill would end that. In any case, close to 90% of coming defense business will be negotiated. That's a big increase over the normal 60%-40% split between negotiated and bid contracts. But it's what you can expect in a mobilization period; negotiated contracts are faster and better suited to large-scale buying.

 Something New-The present law gives subcontractors a somewhat better break than they got in World War II. Suppose you contract with a company to supply material for inventory. Later the company uses some of that material for production under a negotiated defense contract. Under the wartime law, your contract with the company was subject to renegotiation. Under present law, it isn't. However, if the company with the prime contract buys the same materials from you for the specific purpose of filling that contract, not just for normal inventory, your subcontract will still be renegotiable.

The current ruling that subcontracts for "collateral" items are not subject to renegotiation is expected to be extended before it expires at the end of this month. Collateral items are such things as machine tools, cutting oil, cleaning fluids, etc., that don't actually end up as part of defense products but constitute a necessity in producing them.

• How Much Profit?—How much profit the government will let you keep still depends on the "exercise of judgment" by the Renegotiation Policy & Review Board. In past cases, the board has allowed anywhere from 2% to 20% on sales volume. Within that range, the board sets a figure based on six criteria: efficiency of the contractor; reasonableness of costs and profits; amount and source of capital (whether private or public); extent of risk in fulfilling contract; contribution to the "war effort"; and character of business in which he is engaged.

Du Pont Gets Contract For H-Bomb Production

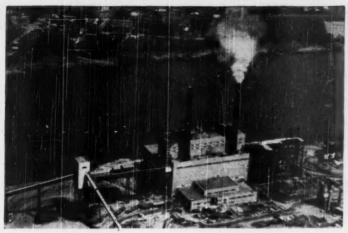
The Atomic Energy Commission is planning a big new production plant, and du Pont is going to design, operate, and run it.

Nothing official has been said about the purpose or nature of the new project, but it's a good guess that it will be the first production plant for the hydrogen bomb. If it is, it will be similar to the Hanford Works at Richland, Wash., which manufactures plutonium for A-bombs. Du Pont designed and built that plant and was its original operator.

An H-bomb plant would involve construction of one or more chain-reacting uranium piles, similar to those at Hanford. Chemical plants would be needed, both to process the uranium fueling the piles and to treat the lithium

raw material.

Du Pont has been out of the atomic energy business since 1946, when it turned over operation of Hanford to General Electric. Since then, it has made a number of technical studies for AEC, but has had no operating responsibilities.



POWER IN THE MAKING: American Gas & Electric's new Philip Sporn plant at Graham Station, W. Va., will double its present 300,000-kw. capacity when two

units now going up are finished. Eventual plans call for total of six units, supplying some 6-billion kwh.—more than Hoover Dam generates.

Enough Electric Power-If

Utilities are in good shape for short-haul mobilization; total capacity by 1950 yearend will be some 67.5-million kw. Long-term prospects depend on whether men and materials are available.

Industrial mobilization will bring no electric power dimout to the U. S.—not right away, anyhow. There's ample electric power to back up the President's partial mobilization for a year or two.

• The Long Haul—Whether there'll be enough for the long haul depends mainly on three factors.

(1) The tempo of mobilization. If demand for aluminum and other products requiring big blocks of power jumps faster than anyone now expects, there may be local shortages. Even these won't come soon; you can't build a new aluminum plant overnight.

(2) Government-industry planning. If new industry locates in areas where power is none too plentiful—the Pacific Northwest, sav—there'll be trouble.

(3) Priorities and allocations. Right now, manufacturers of electric supply equipment have just enough steel, copper, and various other metals to keep working on 1951-52 orders. They will need a steady flow of these critical materials to get the equipment finished on schedule. If anything stops them, all bets are off on power supply for 1952 and later. It looks now as though the schedules will be met—if the government moves fairly soon to give priorities and allocations to power equipment builders.

• Conversion to War-There's more stretch in the present power supply

than you might think from statistics. Industry's shift to a war footing would automatically produce more efficient use of power capacity. Long before the U.S. reaches the blackout stage, some nonessential power users would be converted to military production. And industry, by far the largest power consumer, would be on a three-shift schedule that would simply flatten out peak demand over a 24-hour day.

• Short on Reserve—Cold statistics paint a grim picture at first glance. In 1939, electric utilities had reserve generating capacity amounting to 35% of peak power demand. Just after Pearl Harbor, this margin of reserve (unused equipment as percentage of peak) was 22%. At the end of 1950—power demand is highest in December—estimates of reserves range from 12% to something over 15%.

But this is only part of the story. The margin of reserve is less, but the country's electric powerplant itself is far larger than it has ever been before. Electric power systems, both public and private, now have generating plants with a total capacity of 65.6-million kw. By year's end, this total will rise to 67.5-million kw.—thanks to new installations. In 1939, utility plants had a total capacity of only some 38.9-million kw.

There's a good reason why reserve capacity is so much smaller now. After

the recession of 1939, the gears of power-consuming industry were just getting into high when bombs fell on Pearl Harbor. Most industry was booming when we sent troops into Korea.

• Expansion—The power industry is far better fixed for plant than it was in 1939. Today it's nearing the two-thirds mark of its \$9-billion postwar expansion program. It has upwards of 12.5-million kw. of new capacity on order for delivery in the next two years. Work on most of these orders is so far along that only a major crisis would be likely to stall them.

Power equipment manufacturers have greatly expanded their production facilities. Capacity to produce generating equipment alone has jumped 75% to 100% since 1940. Manufacturers are producing at the rate of 500,000 kw. of generating capacity per month. They could boost that output 20%-30% if they had to-by standardizing turbogenerators of various capacities.

And utilities know how to speed up installation of new generating units.

 Big Threat—The big cloud on the horizon, of course, is shortages of raw materials and manpower. Utilities and equipment builders know that both are going to be squeezed. The big questions are how much and how soon.

Utilities have been rushing to confirm orders for heavy equipment for several weeks now. Orders for new generating and transmission facilities that were dangling before Korea are now firmly booked. Inventories of smaller equipment—for maintenance and routine operations—are generally in good supply. Wire conductor may become scarce in six months to a year if aluminum and copper become critical.

Philip Sporn, president, American Gas & Electric Co., put the case like this last week: "Provided the electric companies of the U.S. receive the necessary help from the government in obtaining manpower and materials for their current construction program, they will have sufficient capacity to meet any immediate demands that industrial mobilization will make upon them." The fact that Sporn's comment came as he was about to dedicate AG&E's new Philip Sporn plant in West Virginia gave it extra point.

• Need for WPB—The right kind of controls is the key. The utilities are pinning their hopes on having government controls similar to the old War Production Board and its Office of War Utilities. They are suspicious of Truman's initial idea of letting the Commerce Dept. allocate scarce materials on the basis of the Interior Dept.'s screening of claims. They're afraid that Interior might screen out all claims for power equipment except those of its own power agencies.

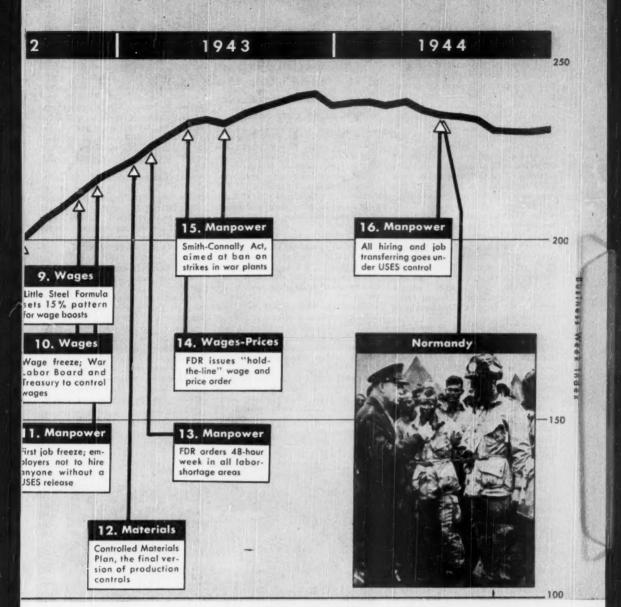
NSRB Rushes 1950 Mobilization Plans

Officials at the National Security Resources Board this week had their eyes on the clock while they slapped together the first blueprints for the mobilization controls machinery. They expected Congress any minute to hand them the bundle of legal authority President Truman had asked for. They were racing against time to have an administrative process ready by then.

What they unveil will remind many a businessman of the early defense days of 1940 and 1941. For NSRB has kept an eye on the experience of World War II, as well as an eye on the clock The controls spelled out in the Defense Production Act of 1950 read almost word for word like sections of the War Powers acts of 10 years ago. The broad objectives of industrial mobilization are

the same. So are the types of controls.

• Moving Faster—The timetable for slapping on the controls will be a lot less leisurely though. Everyone agrees that the extreme pressure on materials in today's booming economy calls for some kind of materials controls immediately. And, surprisingly, there is much agreement on getting wages and prices nailed down in a hurry, too. Bernard



Baruch's battalion of total control advocates may win their campaign. But if they do, they will get no thanks from the Administration. Neither Truman nor W. Stuart Symington, NSRB boss, (cover) believes that full-scale controls are necessary yet.

• World War II—Baruch and Symington are reading different lessons from the same text—the World War II experience (chart). As Baruch sees it, the delays in adopting price and wage controls after materials went under allocations were the source of many of the

headaches of the last war. To Symington, they simply prove that you don't have to go all-out in the early stages.

In the present mobilization, we have obviously reached the stage where materials control is coming in a hurry. And NSRB is racing its motor to get some important preliminary work out of the way first. In the process, NSRB is fast losing its identity as a planning agency pure and simple.

• Quick Change—When Symington moved in as NSRB chairman early this year, it sounded as if he had been given a softer berth. He had been Secretary of the Air Force for three preceding years that were then sincerely described as tempestuous times.

But Korea changed the whole picture. Overnight, Symington was faced with a rush job of completing unfinished mobilization plans. The goal had already been set: total controls to match total mobilization for total war.

 Halfway House-Again there was a switch. President Truman decided on limited mobilization for limited war. So the NSRB shop turned itself inside out to develop a plan for partial mobilization. That's the current job.

Evidently, Symington has changed his mind about the character of NSRB in the past few weeks. He has been saving that his outfit would make the over-all policy and planning and that others would carry out the plans.

But the new blueprints that are taking shape don't put NSRB in the remote upper regions of planning and coordinating. They assign it the very earthy-and powerful-role of balancing the military and civilian claims on scarce materials. This operation is the heart of a materials control system. And it is something that Symington seems reluctant to let get out of his hands.

• The Machinery-This is about how Symington and his men think the

system would work:

NSRB itself will tackle the first task -reviewing the military requirements. It is getting figures daily from the Pentagon in support of the military's \$10.5 billion appropriation request. NSRB presumably will have to decide whether the Dept. of Defense should get all it wants.

Next NSRB will square the determined military needs with other vital requirements. It will decide what is essential beyond the strictly military stuff. After all the essential production is fortified with materials. NSRB will come up with a figure on what can be spared for business-as-usual.

• Hair Pulling-There's a squabble now within the Administration over who will parcel out that important remainder. Who, for example, will tell Detroit how much steel is left for automobile

production?

By putting NSRB into the operating end of controls. Symington is inviting a collision with Secretary of Commerce Sawyer. Sawyer figures his department is going to have to do all the real work involved in the priorities and allocations job. He naturally assumed he was going to have the real say-so on who gets what and how much. Commerce has the industry experts, Commerce has the contacts with industry, and Commerce is an operating department of the government. Therefore, Sawyer reasons, it is only natural for his department to perform the whole function of allocating materials.

• Rubber First-Regardless of who runs the show, the prospect now is that the first order allocating a critical material will be issued within a month. The first allocated material may be rubber. Copper will follow in two weeks. Later on, steel and other metals will get the

treatment.

Rubber heads the list because it's already obvious that stepped-up production plus natural rubber purchases won't meet all military and civilian demands.

What Price Atoms?

AEC gives first clues to cost of atom power plants. Conclusion: at least 12 times as much to build as standard ones.

For the first time since it started thinking of atomic power, industry this week could pin down some figures on what an atom plant might cost. In its eighth semiannual report, the Atomic Energy Commission published the first detailed cost estimates of what expenditures might be involved in building and operating a plant using radioactive ma-

AEC's figures actually applied only to a processing operation involving a radioactive material, not to atomic generation of power. Still, to engineers, their figures gave some clue as to the probable cost involved in building atom power

· Breakdown-To start with, AEC pictures a hypothetical processing plant of today. It does not use radioactive materials. This hypothetical plant cost around \$1-million, and its annual operating expense runs to approximately

Against this, AEC set up a similar processing plant, but one using radio-active materials. It would cost about 12 times as much, or \$12-million. Its

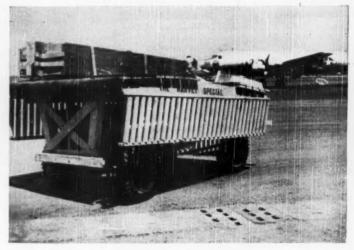
operating expenses would top \$2-million a year.

A building to carry on the processwithout radioactive materials-would cost only \$27,000. Put in the atoms. and AEC figures the bill will go up to at least \$1.3-million. Most of that would be poured into a massive concrete structure to shield against radiation. For processing equipment, the conventional plant needs an outlay of \$103,000; for the radioactive plant, it would probably take upwards of \$4million.

· Safety Costs-In operations, AEC says, 64% of total operating expense for the radioactive plant "would be incurred solely because it is necessary to provide radiation protection." Actually, only 3.7% of the expenses would be listed under radiation protection. But depreciation would come to nearly \$1.2million a year, or more than the total cost involved in constructing a non-radioactive plant that would be com-

parable.

· Subject to Change-AEC admits, though, that figuring depreciation on the basis of 10% a year is pretty much guesswork. Continuing research, it says, creates an "unpredictable element of extraordinary obsolescence" for any radioactive processing plant built now. But, even tossing aside the question of depreciation, the annual costs of running a radioactive plant would be 31% greater than for a nonradioactive opera-



Tinkering Turns Jeep to Cargo Carrier

This ugly duckling was once a jeep. It got its present strange shape at a 5th Air Force base in Japan when GI's added a cargo platform so they could use the vehicle to load cargo planes flying the airlift to Korea. The men call their remodeled product the Harvey Special, after Col. Martin Harvey of Newport News, Va., executive officer at the base. It has already proved its usefulness at the base, and it might make a place for itself later in industry.

Subcontracts Will Spread Defense Work

Once the war mobilization machinery starts grinding out orders, the government tries to give everybody a cut. It's common sense to spread the load as widely as possible. But it's tough to do.

If you are a General Motors, you can expect to dicker directly with the government—you'll be one of the handful of prime contractors. But if you run a small or medium-sized plant, you'll

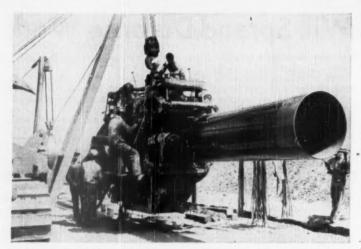
probably never see a government contract. You'll still get your share, but you'll subcontract through one of the big fellows.

That's the way the government went about it in World War II. And it explains why so many small companies are now scouting for orders—not in the drafty corridors of government procurement offices—but among the companies

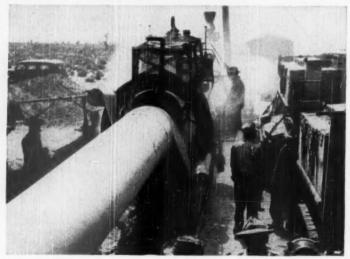
who were the big prime contractors in World War II.

No one yet knows, of course, who will get the big contracts in the present mobilization program. But chances are, barring a few companies that have been merged or dissolved, most of the names below will again head the list. These were the 100 biggest prime contractors in World War II:

Volume of Contracts			Volume of Contracts-		
Corporation	Millions of Dollars	Percent of Total	Corporation	Millions of Dollars	Percent of Total
All companies—Total	8175,063	100.0%	American Woolen Co	\$493 487	0.3%
100 specified corporations—Total	117,634	67.2	Consolidated Builders, Inc	478	0.3
			White Motor Co	455	0.3
General Motors Corp	13,812	7.9	Pirestone the & Rubber Collections	433	4.3
. Curtiss-Wright Corp	7.091	4.1			
Ford Motor Co	5.269	3.0	Pullman, Inc		0.3
Consolidated Vultee Aircraft Corp	4.875	2.8	Phileo Corp	452	0.3
Douglas Aircraft Co., Inc	4,431	2.5	Anaconda Copper Mining Co	446 439	0.3
	3.923	2.2	Fairbanks, Morse & Co	414	0.2
United Aircraft Corp	3.789	2.2			
Bethlehem Steel Co	3.394	1.9			
Chrysler Corp	3,300	1.9	Northern Pump Co	411	0.2
General Electric Co.,,,,,	3.246	1.9	Eastman Kodak Co	407	0.2
Lockheed Aircraft Corp	3,240	*	Mack Trucks, Inc	396 392	0.2
North American Aviation, Inc.	2.768	1.6	Hercules Powder Co	366	0.2
Boeing Airplane Co	2.700	1.5			
American Telephone & Telegraph Co	2,562	1.5			0.1
Martin, Glenn L., Co	2,344	1.3	Remington Rand, Inc	359	0.2
E. I. du Pont de Nemours & Co	2,186	1.2	The B. F. Goodrich Co	0.00	0.2
As a the roll of remotes a continue			Brown Shipbuilding Co	357 351	0.2
	1,974	1.1		349	0.2
United States Steel Corp	1.869	1.1	Higgins, Inc	345	0.4
Bendix Aviation Corp	1.783	1.0			
Packard Motor Car Co	1.531	0.9	Raytheon Mfg. Co	348	0.2
Sperry Corp	1.384	0.8	Dravo Corp	. 343	0.2
Kaiser, Henry J., Co	1,504	0.0	Fairchild Engine & Airplane Corp	334	0.2
		2.5	Smith, A. O., Corp	329	0.2
Westinghouse Electric Corp	1:375	0.8	Standard Oil Co. (Calif.)	327	0.2
Grumman Aircraft Engineering Corp	1,330	0.8			
Newport News Shipbuilding & Drydock Co	1,245	0.7	General Cable Corp	325	0.2
Republic Aviation Corp	1.231	0.7	Electric Boat Co	324	0.2
Bell Aircraft Corp	1,228	0.7	Jack & Heintz, Inc	312	0.2
		0.7	Royal Dutch Petroleum Co	308	0.2
Todd Shipyards Corp	1,191	0.7	Crucible Steel Co. of America	300	0.2
Nash-Kelvinator Corp	1,162	0.7			
Studebaker Corp	1.097	0.6	American Shipbuilding Co	294	0.2
Consolidated Steel Corp., Ltd	1.091	0.6	Moore Dry Dock Co	292	0.2
Goodyear Tire & Rubber Co	1,091	0.0	Hudson Motor Car Co	290	0.2
			Brewster Aeronautical Corp	281	0.2
Standard Oil Co. (N. J.)	1,053	0.6	Autocar Co	279	0.2
Aveo Mfg. Corp	1.045	0.6			
International Harvester Co	1,035	0.6	*		2.2
American Locomotive Co	889	0.5	Soemy-Vacuum Oil Co., Inc	276	0.2
Western Cartridge Co	880	0.5	Jacobs Aircraft Engine Co	269	0.2
			Ingalls Iron Works Co	265	0.2
American Car & Foundry Co	854	0.5	Western Pipe Steel Co. of Calif	264	0.2
United States Rubber Co	798	0.5	American Can Co	261	0.1
Continental Motors Corp	782	0.4			
Sun Oil Co	712	0.4	General Machinery Co	261	0.1
Baldwin Locomotive Works,	712	0.4	Chicago Bridge & Iron Co	260	0.1
			Texas Co	260	0.1
Pressed Steel Car Co., Inc	664	0.4	Galvin Mig. Corp	243	0.1
Permanente Metals Corp.	635	0.4	Stewart-Warner Corp	242	0.1
Radio Corp. of America	610	0.3			
Caterpillar Tractor Co	602	0.3	Down Common & Down Inc.	241	0.1
Allis-Chalmers Mfg. Co	585	0.3	Revere Copper & Brass, Inc.	2.35	0.1
The second secon			New England Shipbuilding Corp	233	0.1
Norden, Carl L., Inc	555	0.3	Colt's Mig. Co	233	0.1
Diamond T. Motor Car Co	535	0.3	Northrop Aircraft, Inc	232	0.1
Willys-Overland Motors, Inc	522	0.3			
California Shipbuilding Corp	503	0.3	Source: " Economic Concentration and World War I		maller War
Bath Iron Works Corp	498	0.3	Plants Corp. Source of figures - War Produc	tion Board.	



SHINE 'EM UP: Self-propelled pipe-cleaning machine puts a sheen on "Super Inch."



COATING MACHINE swathes pipe in hot asphalt, felt, and paper to protect from rust.

Super Machines Lay Super Inch

The big postwar boom in natural gas pipelines is making a more and more specialized industry out of the business of laying pipe. With each new line, somebody develops a new technique or a new machine.

All these tricks of the trade are getting a workout in the latest pipeline project, the Super Inch. When all 1,500 miles of it are laid, the 34-in. pipe will carry natural gas from Texas to Pacific Gas & Electric Co.'s customers in northern California.

• Crossing the Desert-On the haul from the Colorado River in Arkansas to Oakland, Super Inch has to cross the big Mojave Desert. Roads are few, communications almost nonexistent, water scarcer than gold, temperature 117F in the shade. To do the job, the Bechtel-Price-Conyes contractor combute calls on all the hard-won skills of pipeline building.

Big side-boom tractors have been redesigned to pick up heavier loads in loose sand. Special fork-lift trucks grab three 32-ft. lengths of pipe at once from rail flatears. Mobile cleaning machines straddle the pipe to scrape and polish it.

The headquarters camp moves in 50mi. jumps, keeps tabs on the line by two-way short-wave radio. "Beats the gear we had in Arabia," a veteran pipeliner says.

BUSINESS BRIEFS

The strong rail outlook (page 69) spurred major carriers to adopt a plan to add 122,000 freight cars to their rolling stock. The Assn. of American Railroads figures the program will cost \$670-million and will take 2½-million tons of steel.

The first atomic reactor to be privately financed will be built by the University of North Carolina in cooperation with AEC. Cost will probably be somewhere around \$1-million.

Coming of age: The first buyers' guide covering nuclear science is one more sign that the field is now a full-fledged industry. Nucleonics, a McGrav-Hill publication, will include the directory of materials and equipment manufacturers in its November issue.

A spurt of orders in the last two weeks pushed July machine-tool sales far ahead of their June postwar peaks. Buyers wanted to get in before prices climbed or priorities went on.

Hotel rates jumped an average of 6% in New York City following an arbitration wage award to hotel employees.

Synthetic nubber output will be stepped up to 675,000 tons a year, a 100,000-ton-a-year boost. The President's order will probably mean the reopening of all but one of the government's standby general purpose synthetic (GR-S) plants.

PanAm failed to get an O.K. on its 1945 application to start domestic flights. The Civil Aeronautics Board found no need for additional service over the routes PanAm proposed.

Fourteen aircraft companies got orders from the Air Force for \$4.3-billion worth of planes, parts, and equipment. Pending Congress' appropriation of more money, the work will go on under letters of intent.

Mobile's sick shipyards are reviving under Korean war business. Jobs include refitting 10 Victory ships from the mothball fleet and repairing two other freighters for military transport duty.

Five hundred LPG buses (BW-Apr. 8'50,p68) were ordered by the Chicago Transit Authority from Twin Coach Co. The buses are fueled by a mixture of propane and butane gas.

The doctor advises a patient about HIGH BLOOD PRESSURE



DOCTOR: "Your recent physical examination showed that you are in good condition, although your blood pressure is up. Additional tests and examinations I have made indicate that you have uncomplicated high blood pressure. This means that no underlying diseases or infections are causing your condition.

"Actually, high blood pressure, or hypertension, may be slight, moderate, or severe. Even when it is severe, many people continue to lead active, normal lives for many years simply by following the doctor's advice and by adopting healthful living habits."

PATIENT: "Just what is high blood pressure?"

DOCTOR: "It is a condition that results when the blood flowing through the body's small vessels meets increased resistance. This is usually brought about by the narrowing of these small vessels. This narrowing may occur in response to emotional or other factors.

"Everybody's blood pressure varies from time to time. However, when these blood vessels remain constantly tightened up, persistent high blood pressure results."

PATIENT: "How does high blood pressure cause harm?"

DOCTOR: "Mainly by placing an additional strain on the heart and blood vessels. This, in turn, causes enlargement of the left ventricle of the heart. As a result, the efficiency of the heart's chief pumping chamber is lessened. Then, too, the arteries wear out sooner than they would if the blood pressure were normal."

PATIENT: "I understand. Now, Doctor, what can I do to help myself?"

DOCTOR: "First, learn to avoid worry and mental strain. For example, if there are situations which always upset you, make a special effort to avoid them. Slow down—go through your daily routine without undue fuss or hurry. The calmer you become, the more your blood vessels tend to relax—and thus help to lower your blood pressure. You must also get your weight down to what is normal for you and keep it there, you must get plenty of sleep and rest, and you must not neglect having periodic health examinations."

PATIENT: "What about the new treatments . . . special diets and drugs?"

DOCTOR: "In selected cases, the newer forms of treatment are often helpful. Some of the newer drugs may be helpful in many cases, but owing to the wide variation in the causes of high blood pressure, these should only be taken with the advice of your physician. Various diets in which salt, protein, and fats are restricted have often benefited some patients. But in your case, like many others, simple common sense treatment usually produces good results."

Knowledge of what causes high blood pressure is increasing, thanks to research supported by the Life Insurance Medical Research Fund and others. In fact, there is hope that both preventive and curative measures may be found as research continues. For more information about high blood pressure, write for Metropolitan's free booklet, 80S, entitled "Your Heart."

Metropolitan Life Insurance Company TO EMPLOYERS: Your employees will benefit from understanding these important facts about high blood pressure. Metropolitan will gladly send you enlarged copies of this advertisement — suitable for use on your bulletin boards.



Living room of Ranchero Villa homes is spacious, airy, yet comfortably warm with Webster Baseboard Heating.

LUXURY HEATING in 3-Bedroom Homes at \$9,350

Ranchero Villa, Gordon Bronson's project at Raritan, New Jersey, set a new precedent for quality heating in the under \$10,060 field by including true perimeter heating—Webster Baseboard Heating.

This mild, even, economical heat was unheard of in pre-war days even in the most luxurious homes. Now Webster engineering has made true perimeter heating a possible choice for home buyers spending less than \$10,000.

Progressive builders, like Gordon Bronson know that this modern forced hot water heating adds a plus value to homes and actually reduces cost in comparison with older types of hot water heating.



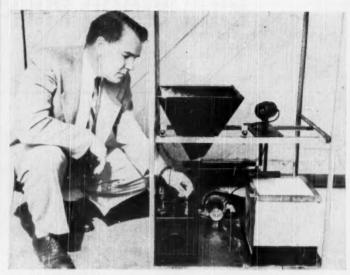
There's a Webster factory representative near you—let him suggest the most practical Webster Baseboard Heating layout. Or write for descriptive literature.

Address Department BW-8

WARREN WEBSTER & CO. Camden 5, N.J. Representatives in Principal Cities In Canada, Darling Brothers, Limited, Montreal



WEATHER



RAIN GENERATOR is just one factor in a solid new western industry.

Nature Control Is a Business

Weatherman Irving Krick now has company to increase or reduce rainfall, give accurate forecasts to businessmen.

Water Resources Development Corp.'s letterhead is unique: "Surveys and field operations for scientific rain induction, rain suppression, and related water problems."

• Weather "Industry"—The new corporation, founded last March in Pasadena, Calif., said last week that it expects "substantial" business its first year. This means weather modification is now a solid industry rather than a mere experiment. And hard-headed businessmen are buying its services for just one reason—they think that it pays them to

The basis of this industry is accurate weather forecasting, which is of great value to many a business. But it also includes actual weather-control jobs, the most popular of which is so-called "rainmaking." Actually, this is "rainincreasing" rather than rainmaking.

 Company and Man—WRDC has a long lead in this field because it's the baby brother of Irving P. Krick's American Institute of Aerological Research.
 Krick contracts for almost any sort of weather-control job. He will guarantee to increase the yield of wheat land, the



WEATHERMAN Irving Krick

grass growth on ranges, or maintain certain levels in reservoirs—all by rain-cloud sceding with ground-based silveriodide generators. But a good piece of his success lies in the fact that Krick will not take on any job unless he's almost certain that he can do it successfully.

Dr. Krick, only 43, is becoming the world's best-known weatherman. A hearty extrovert, in youth a professional pianist and radio-station manager, Krick got a Ph.D. in meteorology from California Institute of Technology, where



"I'll take the one with the PYREX jar"

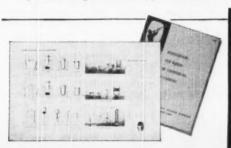
PUT yourself in the buyer's shoes and you see one reason why sales of the Waring Blendor have climbed steadily. It gets credit for being the quality product it is at the place where it counts most . . . the point of sale!

The busy retail salesman need only say, "This Blendor has a genuine PYREX brand glass jar." That is enough to prove to the customer that she is getting the best glassware available. The rest of the quality story is supported; the sale is clinched.

The PYREX trademark gives its own sales talk. It says, "This jar is in keeping with the quality of the product. Tough and durable, you can use it to blend

hot or cold foods at will. Chances are, it will last as long as the machine itself." The customer knows she is getting the best in glass.

The American housewife knows, likes and buys PYREX brand ware. A recent survey revealed that 90% of them own PYREX ware. 92% said they were completely satisfied with it. Why not put into your product a material that carries a trademark that sells for you? Corning engineers will be glad to discuss it with you. Or if you prefer, mail the coupon below for your copy of booklet B-84, "Manufacture and Design of Commercial Glassware." We'll see that it reaches you promptly.



Corning Glass Works

195 Crystal Street, Corning, New York

Please send me a copy of your booklet 8-84 "Manufacture and Design of Commercial Glassware."



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COMPANY	
ADDRESS	
CITY	STATE



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he later headed the meteorological department.

• Practical Background-He set up the first modern airline forecasting service (for Western Air Express, now Western Air Lines), and later, American Airlines' weather service. In World War II, he headed the long-range forecasting unit which gave Gen. Eisenhower the green light, weather-wise, for D-Day.

Then he started his nonprofit aerological research institute, for researching the weather factor in business, agriculture, and industry. Within no time, it had an international reputation for accurate long-range forecasting. Today, it has more than 200 clients, many among the bigger U.S. companies in their

• 90% Right-Krick has been something like 90% right in weather forecasting. Such accuracy there has aided WRDC field men trying to increase, or suppress, rain.

Much of Krick's forecasting technique he keeps to himself. But a lot of it is "analog"-looking up previous conditions just like the present one, to see what happened then as a possible guide to what will happen next.

· Historical Data-Krick says that the importance of keeping up with historical weather data can't be overemphasized. His staff of 42 has compiled a wealth of detailed weather information covering the entire U.S. for the past 50 years. This is the basis for the survey Krick makes before he takes on a rain-increasing job: studies of meteorological peculiarities in a given area show how

Krick also studies records of upperair conditions for the past 10 years. That shows him where to place his ground equipment to get best results.

much that area should be seeded.

Krick then interprets this data into dollars and cents for his client. A rerecent survey in one wheat-growing area, for example, indicates that every inch of rain increase over a two-year growing season would boost the wheat vield 3 bu, an acre. And he figures that he might boost the rainfall from a normal 7 in, a year to 12 in. That could mean 15 bu. more per acre, or a \$1.5million greater gross income, to the owners of 50,000 acres of wheatland. The cost for increasing the rainfall over the same area would run only between \$20,000 and \$30,000.

• Clients-Institute clients include:

• U.S. National Bank of Denver (BW-Jun.17'50,p90) which buys forecasts to help its farm-and-ranch customers decide what to do next.

· A big farm-implement company which shapes its production to the pattern of institute forecasts, and now plans to make its dealers the farmers' own special weathermen.

• A transwestern railroad which buys forecasts to foretell crippling storms, etc., and also to help farmers and ranchers in its territory.

· Oil companies which want to know where the weather will be sunny, and traffic and gas consumption heavy. · Rain Increase-Such a service naturally led to "rain increase" since efficient rain increase depends on knowing exactly what the weather's going to be.

Another tool of great power in making rain increase a standard procedure was Bernard Vonnegut's discovery in the General Electric laboratories. Vonnegut found that the crystals of silver iodide, a compound not found in nature, are virtually identical with natural ice crystals.

• How It Works-GE scientist Vincent Schaefer had shown that water droplets will freeze on natural dust particles or ice crystals in "supercooled" clouds (below freezing but still liquid). That makes snowflakes which become heavy enough to fall, and in summer melt into rain. Almost all our precipitation ap-

pears to be formed this way.

Schaefer first caused artificial snowfall with dry ice that started ice crystals forming in such a cloud. But Krick favors the ground generator over seeding by plane. Reason: The better the weather is for seeding, the worse it is for flying. Ground generators can hit all conditions suited to seeding. And you can work at night, when best cloudseeding conditions frequently occur.

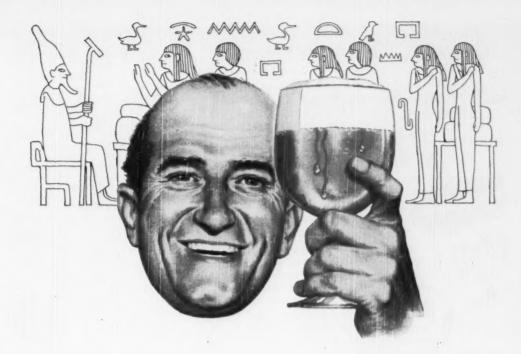
• Rain Factory-Silver iodide crystals work as nuclei on a supercooled cloud over a wider range of temperature than any natural dusts. And they are effective right up to a few degrees below freezing. Thus if you have a cloud a mile thick and only natural dusts for it to "nucleate" on, you may get rain only from its top quarter-mile. Silveriodide smoke, on the other hand, may turn almost all the cloud's mass into a rain factory. And unlike ice crystals, which may melt or evaporate, each silver-iodide crystal is permanent, and will remain aloft until it brings a raindrop down with it.

What this means is that since temperature is not such a critical factor with silver iodide, it is a more effective rain increaser than natural dust.

· High Control-Krick has a high derain increaser than natural dust. tions. The reason is that he has developed a silver-iodide generator which makes it possible to tap clouds very efficiently from a ground-level station.

Krick's newest generator is 3,000 times more efficient than the first one he built. And it is portable, weighing less than 200 lb.

In this cheap, light, portable generator, coke saturated with silver iodide is burned at temperatures between 2,500 and 3,000 degrees. The blower which makes this heat also blows the resulting silver-iodide smoke or haze



The Brewers uncovered a new wrinkle in an old, old science

THE ancient amber brew, you might call it.

Brewing was a familiar art at least 5500 years ago by archeological record, and probably for many centuries before that.

In such a dynasty, the brewers naturally have run the gamut of materials for their equipment. Starting with the sun-baked clay of the ancients, ranging through wood and various metals, today the emphasis is increasingly on stainless steel in the never-ending search for higher quality and purity, finer taste and flavor, and lower overall costs. The bright, shining face of Allegheny Metal is to be found in equipment from one end of a modern brewery to the other, in the barrels on the trucks and in the bar equipment of the tap-rooms.

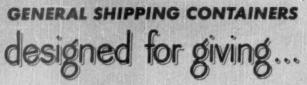
The reason why is easy. No other available metal is at once as strong and as resistant to corrosion, heat and wear as stainless steel. Allegheny Metal lasts longer, looks better, is cheapest in the long run. • Call us—let us help make these advantages pay off for you.

Complete technical and fabricating data—engineering help, too—are yours for the asking from Allegheny Ludlum Steel Corporation, Pittsburgh, Pa... the nation's leading producer of stainless steel in all forms. Branch Offices are located in principal cities, coast to coast, and Warehouse Stocks of Allegheny Stainless Steel are carried by all Joseph T. Ryerson & Son, Inc. plants.

WAD 3147

You can make it BETTER with Allegheny Metal





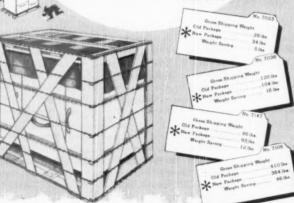
BETTER PROTECTION AT REDUCED COST

HERE'S HOW-

General Box Company maintains two of the country's finest

Designing and Testing Laboratories. Every month, scores of products arrive at these laboratories. Our Engineers re-design the containers so they are "Part of the Product"—so they are lightweight, extra-strong, compact! You, too, probably can substantially cut your packing and shipping costs. We'll be glad to provide full details. Better write today on this cost-reducing, profit-increasing subject.





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Continental Box Cempany - Mississippi, Meridian, Miss.

General Box Cempany - Mississippi, Meridian, Miss.



(it's virtually invisible) up at a rate which carries 30-quadrillion submicroscopic crystals per minute into the clouds. Each of these is a potential raindrop, each a nucleus better than any natural dusts.

• One-Man Job—Such a generator plus fuel can be hauled around and operated by one experienced man using a pick-up truck. Stationed to windward of a client's territory, it is turned on when the right sort of general storm is at hand. If the wind changes, the generator is hustled to a new station. In one recent job, there were several such changes in a 36-hr. period during which the generator burned continuously.

The biggest WRDC jobs so far, territorially speaking, are two adjoining ones to bring rain to an area about twice as large as the state of Maine, in drought-stricken northeastern New Mexico and southeastern Colorado. WRDC uses a score of generators on these two jobs—not all at once, however.

• What to Seed—WRDC does not fool with local storms, or "chasing cumulus clouds up dry gullies." It waits for the big Pacific and Arctic highs to shove across the U.S. contending with the

across the U.S. contending with the warm, moist air masses from the South, the fundamental process of U.S. weather, producing clouds or rain over a wide area.

Then it puts its generators to work.

Results in its brief career already include: (1) an extra 1.8 in. of rain which translated into 150,000 extra bushels of yield this summer for a wheat rancher (his neighbors outside the downwind "plume" or "shadow" of the smoke got only half an inch) and (2) 3.8 in. over a southwestern area that had had virtually no rain this year.

• Rain Suppression—Such jobs often include odd and delicate angles—for example, trying to keep cirrus cloud over a hot and cloudless wheat country to cool the soil and so improve the wheat: trying to keep a similar cloud cover, to avert frost, over another wheat area where early frosts have often ruined the crop.

Both these latter fall in the rain-suppression field. How is it done? By "overseeding"—fanning so many nuclei aloft into a cloud that they freeze up all the available moisture, without any one crystal accumulating enough to become heavy enough to fall.

Such a cloud may float "in cold storage" until it runs into a fresh source of moisture. It also will probably be possible to cut down hail-and-lightning damage, since the storms that produce both are simply intensive thunderstorms, and could be seeded early and their immense energies dissipated in gentle rain.

• The Amateur Hand-All stages of a rain-increasing program must be in the hands of qualified meteorologists, Krick

\$715,749,000" INVESTED IN POST-WAR INDUSTRIAL BUILDING

in the Gulf South

In four years since the war:

Private industry awarded contracts for one out of every six of its construction dollars in America's newest industrial frontierthe Gulf South, served by United Gas.

That's more than four times the value of industrial construction in all of New England, more than eight times that of New York, \$156,000,000 more than that of New York, Pennsylvania and New Jersey com-

Even more startling: More than one-fourth of all proposed industrial construction announced to this date is scheduled to be located in the Gulf South.

The reasons for this phenomenal development are simple. The Gulf South offers everything industry needs. It offers the solution to industry's three biggest location problems-(1) expanding markets; (2) reliable manpower; (3) great diversification of raw materials. Add to these an abundance of natural gas fuel, plentiful industrial water and electric power, and economical transport systems that give easy access to domestic and foreign markets alike.

They're all here in cities and towns served by United Gas . . . communities where industries and individuals enjoy living together. Begin now by checking your plant requirements against the long list of industrial advantages offered in the Gulf South.

Engineering construction contracts awarded, 1946 through 1949, as reported by ENGINEERING NEWS-RECORD, a McGraw Hill publication, for Texas, Louisiana, Mississippi, and the Mobile, Ala., and Pensacola, Florida, areas.

One of the growing Indust Gulf South-a gas-fired cement plant



UNITED GAS SERVING THE Gulf South

FOR SPECIFIC INFORMATION, WRITE INDUSTRIAL DEVELOPMENT DIRECTOR, P. O. BOX 1407, SHREVEPORT, LOUISIANA



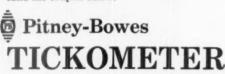
Retired by the Tickometer!

Thorvald could always tally transfers faster than anybody else in the carbarn! Now his thumb is retired with honor, while the Tickometer counts 50,000 transfers an hour—more than Thorvald could count in a day!

The Tickometer takes over one of the most tedious tasks . . . counts tickets, forms, sales slips, currency, checks, coupons . . . automatically and accurately, from 500 to 1,000 per minute . . . records part or full

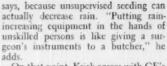
counts on visible registers! Can be equipped to imprint a date, code, endorsement, etc. A time and work saver, wherever counting and/or marking is required.

The Tickometer is rented, never sold—does not require large outlay or expenditure. Learn more about it from the nearest PB office, or send the coupon below.



Made by the originators of the postage meter . . . offices in 93 cities in U. S. and Canada.

1439 Pacific St., Stamford, Conn. Please send illustrated Tickometer booklet to:
Name
Firm
Address



On that point, Krick agrees with GE's Dr. Irving' Langmuir, who frequently lashes out against amateur rainmakers. And Krick gives Langmuir full credit for discovery of the theories of artificial nucleation.

 Disagreement—But on other points, the two seldom see eye to eye. Krick thinks chemists like Langmuir should leave practical applications of cloud seeding to the meteorologists.

"Much of the misinformation about 'rainmaking' has reached the public through statements made by physicists or physical chemists who are not meteorologist." says Krick

ologists," says Krick.
"It is important to remember that before a scientist becomes a meteorologist, he must first be a physicist. After completing his courses in physics, the budding meteorologist must spend at least two years of special study in the field of atmospheric research before he qualifies for his master's degree."

· Neighbors Unhurt-Krick says there's no danger when trained experts seed, because they know just how much to put in and when to stop, as well as where and why. Also he disputes the early bugaboo that bringing rain to one area may deprive the neighbors. Think of a mighty river flowing overhead eternally inland from the sea, he says. Man cannot precipitate more than 1% of its Thus the utmost possible content. effect downwind from seeding operations is a 1% drop in natural rainfall. And mixing air currents soon restore even this.

If generators were set up all along the Pacific Coast, they could increase the natural rainfall by as much as 30 in yearly, Krick says. Yet this would represent only 1% of the total atmospheric moisture, leaving 99% to flow on over the interior.

• Bigger Things—WRDC and the institute have their eyes on much bigger things. One suggestion: California and Arizona spend more than \$200,000 yearly fighting each other over the Colorado River's waters. That much money put into a permanent rainterease program with generators stationed around the basin, could provide up to 50% more runoff, provide much more than enough water to satisfy all present claims.

However limited Krick's actual powers over the weather may be, they seem to be relatively unlimited to ranchers in dry western areas. One rancher in Colorado said after a successful Krick experiment: "We sure needed that rain bad. That one we got last October was plumb wore out."

To eliminate
wear and tear
and speed up reference



6/2 Million

priceless documents are now being put on Recordak Microfilm

At the Bureau of Land Management you'll see row after row of heavy bound volumes containing the deeds for every parcel of public domain land granted to the citizens of the United States since 1788.

Year after year... these priceless records have been in and out of the files as clerks answered a continuous flow of inquiries from lawyers, realtors, title-abstract companies and historians. As a result many records show the effects of wear and tear... or the stamp of time.

It will be a different story, however, when Recordak microfilm copies of the original documents are available. *Then*, wear and tear on the originals will be halted . . . reference will be much faster. Clerks will have at their

finger tips the contents of 11,500 bound volumes—in just ten six-drawer cabinets—ready for immediate review in a Recordak Film Reader, which enlarges each film image to nearly twice the bound volume size.

Also, whenever additional film copies are needed, they can be made from the master negatives —stored safely in the vaults of the National Archives. Thus, Department of Interior engineers

predict, a photographically accurate and complete film record of 6½ million priceless deeds will be maintained through the years.

Just another example of the way Recordak microfilming is serving Government . . . and 65 different types of business . . . thousands of concerns.

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filing area at the Bureau of Land Management, Dept. of Interior, Washington, D. C.

A small section of the "old"

TRECORDAK

(Subsidiary of Eastman Kodak Company)

originator of modern microfilming and its applications to business systems



The First

N AKRON, OHIO, on August third, nineteen hundred, my father founded The Firestone Tire & Rubber Company. This year we celebrate the fiftieth anniversary of that historic event.

In those fifty years, our Company has grown from a small, abandoned foundry building with a working force of twelve men to a world-wide organization of more than seventy thousand people whose high-quality products are known and respected everywhere.

From the Firestone organization have come many developments that have made transportation history. These include the first mechanically-fastened straight-side tire which was the forerunner of the type now in universal use; the first commercial demountable rim which has now become the demountable wheel; the first angular rubber non-skid tread which is now a safety feature of all pneumatic tires; the first practical pneumatic tractor tire which led to putting the farm on rubber; and the first balloon tire which has now been developed into the present day super-balloon.

Our Company was the first to use racing tire construction principles in regular production tires; the first to manufacture synthetic rubber tires for airplanes and passenger cars; and the first to establish one-stop service stations where car owners could get in one place all of the products and services needed to keep their cars in safe driving condition.

In 1918, father pioneered the "Ship-by-Truck" movement which gave impetus to the development of the trucking industry. He was a leader in the "Good Roads" movement which led to the construction of our nation-wide system of highways.

He waged successful battles against tire and rim monopolies in the United States. And, under the banner, "Americans Should Produce Their Own Rubber," he fought against the international cartels which attempted to control the output, distribution and price of rubber. As a result, the Firestone Rubber Plantations were established in the West African Republic of Liberia, and during the war these plantations were one of the few sources of natural rubber available to the allied nations.

These are but a few of the many important contributions which the Firestone organization has made to the progress of transportation and of civilization during its fifty years of service. This remarkable record of achievement was made possible by those millions of customers both past and present whose loyalty and friendship we value so highly; by our thousands of dealers whose service to car owners has been and is so effective and efficient; and by the men and women of Firestone whose ability and skill have contributed so vitally to our continuing progress down through the years.

Fifty Years

This record of accomplishment is substantial testimony to the superiority of the American system of competitive free enterprise which has given our people the highest standard of living in the world. Under no other system do so many benefits accrue to so many people: to the stockholders who provide the facilities, to the men and women who make and distribute the products, and to the millions of consumers who buy and use those products.

We believe that the next fifty years will bring forth even greater achievements. For example, in synthetic rubber, different formulas are constantly being created to meet specific needs. Technically speaking, synthetic rubber is a plastic and anyone acquainted with the plastic industry ceases to be amazed at the new uses developed and predicted for this material. The future uses of synthetic rubber and other plastics appear to be limitless.

New applications of rubber to insulate machinery and equipment from vibration and to absorb shocks indicate the prospect of a much enlarged market in this field. The next fifty years may bring rubber roads that will be more durable and less costly to maintain. And, in the future, foamed rubber may replace the coil spring in automobile seats, furniture and mattresses. Many manufacturers already are changing over to foamed rubber cushioning materials as fast as we are able to increase our output of this product.

Present-day tire manufacturing equipment is highly efficient, yet we constantly are working on new and improved designs, always seeking to make our machines still more economical, simpler to operate, safer and more accurate. A major project of interest to us is the conversion to new and revolutionary sources of power. Present methods of generating power may give way to atomic energy. Electronic vulcanization shows great promise. Indeed, fifty years from now, a tire manufacturing plant may bear little resemblance to the modern tire plant of today.

This year, as we celebrate the completion of half a century of service, we of the Firestone organization are looking ahead, planning ahead and working ahead so that we shall continue to uphold our tradition of always giving to those who rely on us the "Best Today, Still Better Tomorrow."

Harring ! Tirestone of .

THE FIRESTONE TIRE & RUBBER COMPANY

PRODUCTION



OIL In rough oil-well country, two-way radio is often the only link between drilling rigs and the home base.



UTILITIES Power companies, the biggest users of industrial radio, rely on radio to speed repairs.



LUMBER To keep in touch with the home camp and coordinate operations, loggers use mobile sets.

Two-Way Radio Saves Time for Industry



MOBILE UNIT is a transmitting and receiving unit all in one. The ignition system of a vehicle supplies the power to run it.



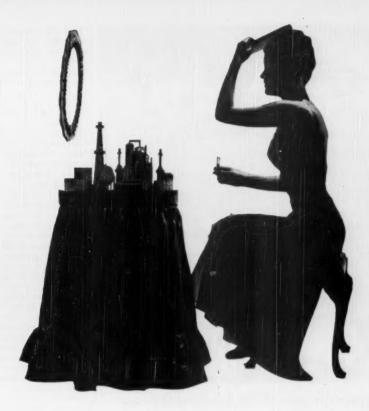
BASE STATION usually has moderately powered equipment, may have a range of 75 mi. Industry has about 20,000 stations.

In some industries, such as railroads and shipping, two-way radio is already the rule rather than the exception. But contractors, logging companies, and power utilities are just beginning to learn what they can do with the mobile radio set and the walkie-talkie. They are using two-way radio to link operations in the field, to handle materials, restore disrupted service to customers, or mobilize for emergencies.

The record of industrial radio on all kinds of jobs already fills an impressive casebook. Here's the sort of thing that shows up again and again:

• At the Bureau of Reclamation's Medicine Dam project in the Missouri Valley, F. F. Lytle Co. and Amis Construction Co., the contractors, got General Electric to help map out a two-way radio system. The network ties their field offices with supervisors in charge of excavation, concrete, and supply. Regardless of where the supervisor is on the site, a field office can get him for split-second orders. During a flash flood, the system helped save cofferdams and equipment from almost certain loss and ruin.

• The Grange League Federation



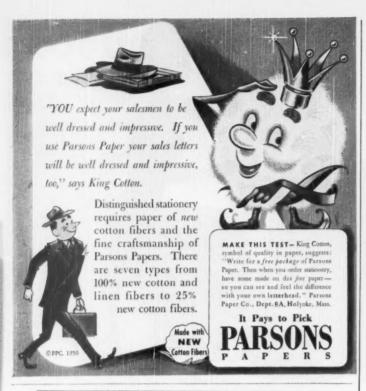
Beauty starts miles down

She's going to be even prettier when she gets up. And petroleum chemicals produced by oil refineries like the one we've put on her vanity will have a lot to do with it. Some are used in her cleansing cream . . . and her foundation cream. They're in her fingernail polish, in her rouge and in her lipstick. They're in her plastic comb and brush. Some waved her hair . . . others keep it glossy . . . still others (in shampoos) keep it clean. And the perfume she uses . . . yes, it too can come from petroleum chemicals.

Atlantic makes petroleum chemicals. We've been at it for many years now. And we're going to keep at it. We're sure that the thousands of uses to which these versatile materials are put today are only the beginning. Our research is already pointing to new and potentially profitable fields for you — and us.

Write to Chemical Products Section, The Atlantic Refining Company, 260 South Broad St., Philadelphia 1, Pennsylvania.





Great sales in the great outdoors



SHOWMANSHIP. Mercury advertises its great car Outdoors... where it's bound to show off to best advantage. On GOA panels your product appears big, colorful and dramatic. It catches the eye, sticks in the mind. That kind of

impact pays off in sales every time! General Outdoor Advertising Company, 515 S. Loomis St., Chicago 7, Illinois.





1925 Silver Anniversary Year 1950

Exchange, Ithaca, N. Y., uses two-way radio to speed delivery of fuel supplies between distribution stations and outlying rural areas. With radio sets in a distribution station and in each truck, the station can route drivers to farms that need emergency supplies, without loss of time or mileage.

 Logging drives on Minnesota's lakes and rivers are directed over a party-line radio system used by Minnesota & Ontario Paper Co. Nine logging camps are equipped with radio. Schedules for spring log drives are beamed from the company's headquarters site to each camp.

• Who's Eligible?—Any company that wants to go on the air with its own system first has to see the Federal Communications Commission, just as commercial broadcasters do. FCC licenses and allocates the channels for all industrial radio services.

Whether you get a license depends on the kind of business you're in and whether FCC considers the service ties in with the "safety of life or the protection of property."

Right now, these are the industries that FCC will license under industrial radio services: power utilities; petroleum concerns who handle almost everything from oil prospecting to supply; forest products companies; producers of commercial motion pictures; and owners of news publications. Contracting or construction companies come under a heading called special industrial radio. Still another service—low-power industrial radio—allows walkie-talkie type sets to be used in a plant for fire protection and policing.

• Manufacturers—The job of installing and testing two-way radio equipment is handled almost exclusively by manufacturers. If you ever go window shopping for equipment, you'll probably get in touch with the leading ones: General Electric, Link Radio Corp., Motorola, Inc., or RCA. Manufacturer's engineers will make a survey of the size of the radio network that a company needs, the power of the central station and mobile sets for the distance to be covered, and the geographic layout of the net.

In a typical installation, a utility with one base station and 30 or 40 mobile units spends about \$30,000. A mobile set alone costs no more than \$400.

• Limitations—Don't expect to work wonders with a two-way radio system. It has just as many limitations as it has good points. For one thing, it isn't a private telephone line. Because of a lack of channels, most users of industrial radio must share their channels with other licensees. A radio network for a utility, contractor, or petroleum producer is more like a rural party line.

The range of a system, too, is limited. It depends upon local terrain, the sites

of the central station and the mobile stations, and atmospheric conditions. Flat country will give better range than a hilly or mountainous terrain. Most equipment manufacturers can guarantee dependable operation within a radius of 35 mi. Boost the power output and increase the height of the central station, and they can up the range to 60 mi. or 75 mi.

In cities or around industrial sites where there are a lot of buildings, small-powered hand sets are likely to fade out occasionally. Communication on channels allocated to industrial services is frequently a line-of-sight proposition. A high hill or a tall building between two stations can sometimes block the

path of a radio signal.

• Atmosphere—Atmospheric conditions are another headache for users of two-way radio. Static or electric interference is negligible in industrial radio. But the ionosphere—the ionized layers of the atmosphere surrounding the earth—will periodically create freak conditions in reception. Local reception can occasionally fade out for a few hours, and distance stations which are normally never heard come in to replace the locals.

Although a channel has to be shared on a party-line basis, party-line chatter is frowned on in industrial radio. Transmissions must be short and right to

the point.

Actually, the handling of messages by radio, called procedure, isn't regulated too strictly by FCC. An industrial radio net styles its procedure to fit its particular kind of operation. For the sake of brevity, some licensees work out a code for message handling. A one- or two-number group might represent a complete, prearranged message. The code means less time on the air during a transmission. And it gives other stations on the same channel a chance to talk, too.

• Channels Short-Right now, the biggest problem for industrial radio services-and the FCC-is lack of channels. The radio spectrum is only so wide, and it can't be made any wider. This shortage of channels may become even more acute as military operations are stepped up. Already, FCC has had to set up a policy of only one channel to a customer. And it has had to look to cooperative groups for help in finding ways to stretch the few channels available.

In the power radio service, utility companies have formed a co-op group, called National Committee for Utilities 3adio, that works out problems and differences in channel allocations. The committee has divided the U.S. up into 10 regions. In the Great Lakes Region, where power radio systems have just about saturated the few available channels, the committee worked out a



The NEW CLARK Electric TRUCLOADER 1000-lb. Fork Truck

Here are the Reasons Why:

This machine embodies every desirable feature that experienced users have requested. It is the nearest approach yet to the ideal electric 1000-lb. fork-lift truck.

* Automatic Acceleration Automatically accelerated control is standard. First power point selected by directional control lever, on steering column—successive points controlled through master switch which in turn is controlled by an automatic timer. Guarantees even acceleration.

* Hon-Plugging Controls Impossible to change direction until motor comes to full stop. Important safeguard to windings and other vital components.

* "Deadman" Safety Brake Brake sets automatically when the driver feaves seat;

releases when seat is occupied. Combination parking brake and safety feature. Independent of service heaks. Directional control lever also automatically locks in neutral when driver leaves seat.

★ Independent
Hydraulic System—
Separate motor increases
lifting and tilting speeds
about 80 per cent—gives
drive motor big efficiency

boost. Directional lift lever: pulled upward, it raises the forks; pushed downward, it lowers them.

ok Greater Capacity Increased lift capacity and speed; increased travel speed. Simplified driving—finger-tip control; non-kick-back steering.

* Eusy To Sorvite Battery-compartment cover hinged at front for easy access—plugreceptacle conveniently mounted. All greane fittings within easy reach.

You'll want full information on this new "BEST BUY" in the entire field of Materials Handling, Get in touch with your nearby Clark dealer you'll find him a capable counselor on your handling problems. The coupon is for your convenience—no obligation.

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INTO PATRONS

Consideration for customers doesn't stop at the door at Best and Company, New York's fashion specialty shop. A snow-melting system, with grids of Byers Wrought Iron pipe embedded in the paving, keeps winter sidewalks clear. This thoughtful gesture pays off in good will, and eliminates a recurring maintenance chore. Banks, hotels, and clubs are numbered among present snow-melting users—and they find that it is good business to add sidewalks to the sales force. Long life due to the proven corrosion resistance of wrought iron, plus its bendability, weldability and mechanical strength, make it first choice for this service.



Unretouched photograph of Best's sidewalk immediately after big blizzard of '47. Snow-melting system (with Byers pipe) kept walks clear during storm.

Snow-melting is only one of numerous applications where corrosion costs you more than wrought iron. A copy of THE ABC'S OF WROUGHT IRON will give you details. A.M. Byers Co., Pittsburgh, Ps.





BYERS WROUGHT IRON pattern of channel assignments that is the closest solution to eliminating interference among stations. The plan hasn't eliminated interference entirely. But it has reduced it to a slight nuisance value.

A co-op group like NCUR, of course, doesn't have the last word on assigning channels to company stations. But NCUR does work out recommendations that are submitted to FCC for its approval.

• Room for More—So far, the companies licensed under industrial radio service are only a small part of the number eligible. In petroleum radio, less than 20% of the ultimate number of radio systems are in service. Power service still has another estimated 5,000 licensees to sign up. This unused potential could mean an expanding market for equipment manufacturers for years.

For 1950, GE estimates industry sales will hit \$28-million, an increase of \$3-million over 1949.

• What to Do-If your company wants to get into industrial radio, the steps to take will hinge on the kind of equipment you will use. If the network calls for installation work, the company must first apply for a construction permit from the FCC. After the equipment is tested and on the air, the commission will issue a permanent license for the setup. Mobile sets, which are bought as a complete packaged unit, need only one application for a license. Usually, the processing time takes about three months.

Complete details on industrial radio service are covered in Part XI of FCC's Communications act. The section has been made available in printed pamphlet form.

THE PRODUCTION PATTERN

F THE SIGNAL for all-out war production were given tomorrow, would tanks, guns, and planes start pouring out of our industrial plants in a few months' time? Probably not. All-out production whether for war or peace—is never an overnight job.

AST WEEK, at the 25th anniversary celebration of Pratt & Whitney Aircraft Division, United Aircraft Corp., President H. M. "lack" Horner made some pointed remarks about production miracles. Horner was talking about aircraft engine production, a job his company has been doing continuously for 25 years. His industry, for one, faced no "conversion" problem. Yet the figures Horner gave emphasized the inevitable "time element." Horner pointed out that aircraft engines were produced by the entire industry at the rate of 4,400 a year for the months of January to June, 1948. Then he said:

If the engine industry had all the required tools available, top priority on materials, and all the manpower it could muster, it could only triple its production rate in a year's time. In two years, the rate would be seven times. After that, production could zoom. (Wartime peak production of engines was about 57 times today's rate.)

THE "GROUND RULES" for production, Horner said, haven't

changed since World War II. It

still takes nine months to build an aircraft engine after an order. It will still take between 18 and 24 months to train licensees and satellite plants to precision production. And even in the peacetime production of last year, it took Pratt & Whitney six months to get certain strategic materials.

Thus, it's pretty obvious that time is going to be a big factor again. Converting production from automobiles to tanks, from refrigerators to ordnance, from business machines to radar equipment, will take extra months of precious time. And there will be dislocations in the supply of tools, materials, manpower. These dislocations will consume more time and will add to the manufacturer's problem of conversion.

MANUFACTURER looking ahead to war production can begin saving time right now. He can start assessing his production position, his materials-supply sources, possible satellite plants, possible subcontractors. But even with that jump on time, all-out manufacture of war materiel, in quantity, still isn't going to happen overnight.

Our production job in World War II was helped immeasurably by the year or two head start in "mobilization" that industry had before we got in. This time, however, we may not have that advantage.



foundry, GM metallurgists develop new materials and processes that give more durable parts, leading to troublefree operation and long life.

Key to durability

As we plan and build our cars, we work always with two goals in mind. One is to give you the immediate delight that comes from fresh styling and performance, good comfort and convenience.

The other is to make sure that you get long-lasting satisfaction andsubstantial resale value as a car weathers the years.

So all through research, we seek ways of making materials more and more enduring. In engineering, we concentrate on designing things that will last longer as well as perform better. And in production, we focus our skills on building durability right into our cars.

The final result is greater value for you—whether you use a car for its lifetime or trade it in for another. The final proof awaits you wherever General Motors cars are on display.



After thousands of miles of driving torture, GM cars and others are taken apart piece by piece, and the parts are microscopically analyzed for their ability to stand the gaff.



Is the comfort enduring? After building a car solidly and painstakingly, production men still pound away at seat cushions to determine exactly how



GENERAL MOTORS

OLDSMOBILE . BUICK . CADILLAC . BODY BY FISHER . GMC TRUCK & COACH

Hear HENRY J. TAYLOR on the air every Monday evening over the ABC Network, coast to coast.



"WHAT ARE THOSE FIREWORKS, DAD?"

"Powerful sparks, son, from high voltage electricity controlled by circuit breakers. And speaking of controlling electrical performance, Robert, Norton has a hand in that, too, all the way from powerhouse to our kitchen.



"MAKING GENERATOR SHAFTS TRUE with Norton grinders and grinding wheels helps get electricity off to a good start. The same quality-lifting Norton touch also improves vital parts of meters... big ones in factories... smaller ones in homes.



"FINISHING DELICATE PARTS of appliances is a quality job done by Norton tumbling abrasives. Dies and molds that form such parts are made better by Norton abrasives. Heating units of ranges, too, are more efficient because of a Norton insulating refractory.

"THOSE ARE JUST A FEW OF THE WAYS, ROBERT, by which Norton, world's largest manufacturer of abrasives, helps electrical products give better service. Countless other products, too, owe a lot to Norton."



PRODUCTION BRIEFS

Kaiser-Frazer plans a 50% boost in production this month. That will up daily output from 800 to 1,200 cars.

Blaw-Knox Co. will build a chlorine and caustic-soda plant at Saltville, Va., for Mathieson Hydrocarbon Chemical Corp. The products will go into the manufacture of chemicals for water purification, and the paper industry.

A dirt-resistant chemical for cotton fabrics is under test at Southern Regional Research Laboratory, New Orleans. Called carboxymethyl cellulose, it is said to ward off dirt four times more than untreated textiles.

Radioactive engine parts are being tested for wear by Atlantic Refining Co. The wear on moving parts is measured by the amount of radioactive picked up by the lubricant.

National Lead will up annual production of titanium pigments by 70,000 tons, from present 450,000 tons.



Latest jet engine research laboratory, dedicated last week, is Pratt & Whitney's \$12-million Willgoos Laboratory, located in East Hartford, Conn. Pratt & Whitney Aircraft division of United Aircraft Corp. will put the lab to use on its jet-engine development program. The lab is named for the company's first chief engineer, the late Andrew Van Dean Willgoos, who designed the first "Wasp" radial engine that practically put the company in business 25 years ago.

The laboratory can generate up to 80,000 hp. for testing, has an air-pumping capacity of 25,000 hp. It will use 120,000 gal. per min. of water to cool the intense heat of jet exhausts.

NEW PRODUCTS



Crosley FarmOroad: Auto-Tractor in One

Designed especially for the weekend farmer, the FarmOroad is a tractor on weekdays and an automobile on Saturdays and Sundays. It is being marketed

by Crosley Motors, Inc.

Crosley figures there are about threemillion industrial or white-collar workers who farm in their spare time. Farm-Oroad is aimed at that market. The auto-tractor will do 60 mph. on a highway, will tow a Crosley-made plow, disc harrow, mower, or cultivator in the fields.

FarmOroad is only 45 in. high with the windshield and top down, has a wheel base of 63 in. Powered by a Crosley 26.5 hp. engine, the vehicle has both a conventional and an auxiliary transmission. This combination supplies six forward speeds and two reverse

Special farm attachments are drawn by a hydraulic lift on the rear of the machine. The front also has space for an hydraulic power take-off that can be added to control a mower, snowplow,

bulldozer, or scoop shovel.

FarmOroad comes in two body types: a standard and a dump-truck model. Pick-up or hydraulically operated dump bodies are quickly attachable. Headlights with a dimmer switch, parking lights, and tail lights are standard equipment.

'To give FarmOroad greater driving power, designers included four rear wheels. When Farmer Brown heads for the city or the commuters' special, he can take off two of the wheels easily and turn his tractor into a respectable convertible.

• Source: Crosley Motors, Inc., Cincinnati, Ohio.

• Price: \$795, f.o.b. factory.

GARBAGE CAN FOILS CATS

Collectors will have a hard time banging up the garbage cans produced by C&J Industries, Moline, Ill.

The company's newly designed can is bolted to a pole in your backyard where animals or humans can't upend it. It's a square box, holding 15 gal., and is designed to be mounted 20 in. above the ground. Garbage is put into the top. Collectors open the bottom, let garbage drop into their own collecting cans.

The can is made of antirust treated steel; it comes equipped with a waterproof paper liner and a built-in dispenser for DDT.

• Source: C&J Industries, Moline, Ill.

• Price: \$12.50.

POWDERED COAL FOR HOMES

Stephen L. Fitzpatrick, a Detroit inventor, has worked out a way to use powdered coal as a home fuel. In the fall, he plans to market a small furnace that will burn powdered coal suspended in oxygen, mixing it with air the way gasoline mixes in the carburetor of an automobile.

Fitzpatrick has formed a company, BloKolGas System, Inc., to manufacture and distribute both furnace and fuel. He'll start out making a conversion-type unit for commercial use, will follow up with smaller units.

Source: BloKolGas System, Inc., 70
W. Alexandrine Ave., Detroit 1.

RICE CLEANS CYLINDERS

You can now remove the carbon from automobile cylinders without taking off the head by using rice. That's the way a new method developed by Oldsmobile works.

This device, called the Head-on Carbon Blaster, shoots specially treated rice grains through the spark plug hole into the chamber by means of an air jet. As they blow around inside, these grains take the earbon scale off the cylinder walls. After circulating in the chamber, the rice is sucked out again to the blaster.

Oldsmobile dealers are getting their blasters now. They will be available to others late in the year.

 Source: Oldsmobile Division, General Motors Corp., Lansing, Mich.



BAKED AT 2200° F! Thirty hours in a pottery kiln at 2900° F gave that beaupot its start in life. While in the kiln it rested on a slab (batt) of special-formula Norton silicon carbide (Crystolon*). Highly resistant to heat shock and chemical and physical changes, this extremely strong refractory is a product of Norton's 39 years' experience solving special high-heat problems for all industries.



TEMPERATURE.... 3100° Pl Your car's valves and valve inserts will never again meet heat as high as the first they knew. Their metal alloy was melted at 3100° F in a high frequency induction furnace. That furnace was lined to last longer with a special-formula Norton fused magnesia cement (Magnorite*). More and more firms interested in increasing the temperatures of their operations are calling on Norton, pioneers in engineering special refractories for high temperature conditions. There's a Norton representative near you, or write Norton Company, 13 New Bond St., Worcester 6, Massachusetts.

*Trade-Marks Reg. U. S. Pat. Off. and Fareign Countries



"Red Ball" Information Service



This tag illustrates bow cars are identified; SD is for San Diego, 100 is the checking number only this car will have while on the Santa Fe.

Where's that car of freight? When do I get it?

Santa Fe answers these two questions with its RED BALL INFORMATION SERVICE which tells shipper or consignee where his carload is at regular intervals when shipped over our line . . . and tells him fast.

Through the facilities of Santa Fe's vast private communication system

extending to all Santa Fe traffic offices, information regarding your Red Ball freight is promptly placed on your desk. This information will directly benefit you in planning production or sales promotions.

Let us send you our folder describing this service. Just call or write your nearest Santa Fe Traffic Office. It pays to "Ship Santa Fe All The Way"!

F. H. Rockwell, General Freight Traffic Mgr. Santa Fe System Lines, Chicago 4, Illinois

Santa Fe-all the way



NEW PRODUCTS BRIEFS

Electro-galvanized pipe for electric raceways has been developed by the National Supply Co., Etna, Pa. Its interior is finished with an enamel coating. Sizes are \(\frac{1}{2} \) in. to 2 in.

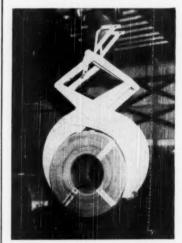
Briquetting presses in five sizes are now available from SPO, Inc., 6436 Grand Division Ave., Cleveland 5. The machines press all types of metal scrap into cylindrical blocks.

A two-way ignition terminal to fit all spark plugs has been made by Burndy Engineering Co., 107 Bruckner Blvd., New York 54. It is built for either straight or right-angle connections.

A one-piece rubber unit that slips between a car's inside buffer strip and the window glass will stop vibration and rattle. The anti-rattle device is made by Rolexco, Inc., Orange, N. J.

A soapless liquid detergent has a bottletop attachment that feeds the fluid automatically. Called S.S. Spray, it's intended for dispensary use in cleaning cuts. Made by Gebauer Chemical Co., 9410 St. Catherine Avc.. Cleveland.

A stamp-vending machine marketed by Commercial Controls Corp., Rochester 2, N. Y., operates automatically when you put in a coin. There's no push or pull, but there is a penny profit to the owner.



These giant tongs, designed specially for picking up coils of strip steel, were made by Heppenstall Co., 4620 Hatfield St., Pittsburgh 1, Pa. It picks them up without distorting the steel, and it's a space-saver because coils can be stacked in vertical position.

MAKE THE SALES PULSE THRUB... Add Excitement with Plaskon Molded Color

Add the excitement of striking color to your products for extra sales appeal. Do it with Plaskon Molded Color... the famous thermosetting plastic molding compounds. Here's a full range of permanent, nonfading colors. Pick those that fit your products. Choose from white through gay pastels and brilliant bues to jet black. Then add the fact that Plaskon Molded Color can be formed into an infinite variety of shapes. And there you have an irresistible sales combination that makes prospects' fingers itch to touch and buy. Like to know more? Write for all the facts.

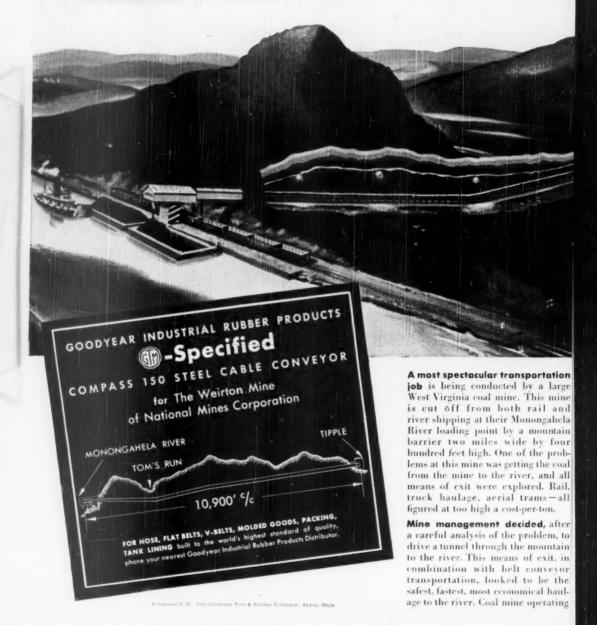


Plaskon Urea and Melamine Molding Compounds have been adding sales appeal to Radio Cabinets, Business Machines, Food Equipment, Lighting, Tableware, Stove and Refrigerator Hardware, Wiring & Micros, Home Appliances, Closures, Buttons, Casmetic Packages, Displays, Toiled Seats, Closure, Dispensor, Beginnes, etc.

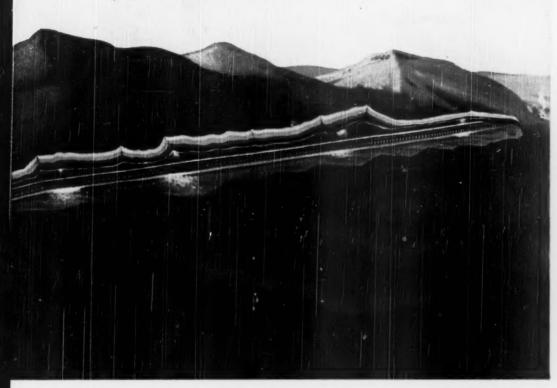
PLASKON DIVISION • LIBBEY•OWENS•FORD GLASS COMPANY • 2119 SYLVAN AND TOLEDO 6, OHIO In Canada: Canadian Industries, Ltd., Montreal, P. Q.

The World's First Two

transports coal <u>under</u>



-Mile Conveyor Belt



history has shown that conveyorizing means continuous, uniform, smooth delivery of coal at the lowest possible cost-per-ton handled.

So they called in the G. T. M.— Goodyear Technical Man. He proved that with Goodyear's Steel Cable Compass Belt a two-mile, singleflight conveyor haul through the mountain was entirely practical. And this steel-muscled belt is so strong and so stretch-free that it

needs but 20 feet of counterweight travel to take up all the stretch and shrinkage in this monster belt. So the tunnel was dug and the world's largest-single flight conveyor belt, 100% longer than any other ever built, was recently installed. This glgantic belt travels a distance of more than two miles—10,900 feet—in one single stretch from mine to dock. It is a single loop of rubber, sinewed with steel, more than four miles in total circumference, and weighs 122 tons. Traveling at a speed of 300 feet per minute, it is delivering 300 tons of coal per hour at the river, at far lower cost-per-ton than possible by other methods.

Such record-breaking performance is made possible by Goodyear's COMPASS belt construction that endows belts with super-strength without excessive weight and thickness. That is why most of the world's longest conveyor belt hauls, both underground and overland, are G.T.M.-specified. For a detailed estimate on any similar big-tonnage project, write Goodyear, Akron 16, Ohio.



THE GREATEST NAME IN RUBBER



WITH DEKS MADE OF LUMARITH ACETATE

Looking for all the world like tufted leather, a Dek† is really a molded square of tough Lumarith acetate plastic. Lumarith was selected because it is shatterproof and tough enough to withstand accidental hammer blows without breaking...its color is clear through and permanent. Headboards, lampstands, breakfast bars, foyers, eigarette boxes, valances, shadow boxes, picture frames and many other articles can be Dektufted for wonderful decorative effects. Selling for 10¢, each Dek is proof that plastic quality need not be sacrificed to meet a low price.

If you want to know more about the tough Celanese plastic that make Deks and thousands of other products handsome, colorful, sturdy and economical, write: Celanese Corporation of America, Plastics Division, Dept. 29-H. 180 Madison Ave., N.Y. 16.

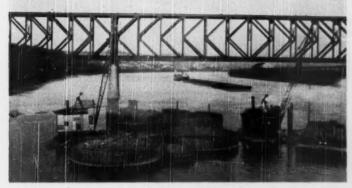


*Reg. U. S. Pat. Off. 4Pat Pending

PLASTICS

Available in Canada through Canadian Cellulose Products, Ltd.

CONSTRUCTION



COFFERDAM CELLS on Dravo Corp.'s Monongahela bridge project are cylinders of interlocking steel sheet piling filled with sand and gravel. Twelve cells form a circle.



INSIDE cofferdam, workmen excavate 25-ft. into river bottom to place bridge pedestals.



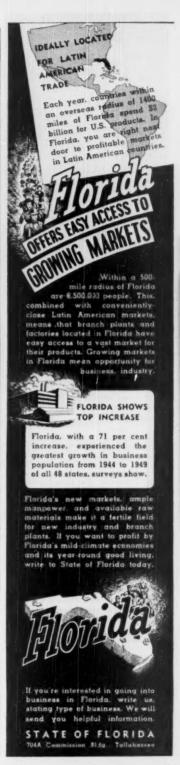
PIER of bridge begins to rise inside cofferdam. It is solid concrete faced with granite.

Cofferdam Stands By Itself

In bridge construction, cofferdams are used to hold the water away while bridge pilings are built on the bottom of the river. They are usually just thin steel walls around the pilings, buttressed with beams inside. But in building the substructure for a 2,070-ft. highway bridge over the Monongahela River, engineers of Pittsburgh's Dravo Corp. had to work out a stronger cofferdam than the conventional one. The river

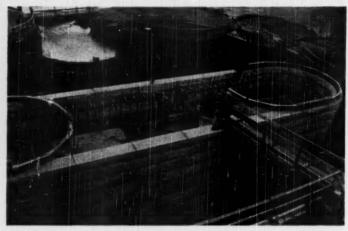
is approximately 50 ft. deep at the crossing.

Instead of a flat wall of steel, Dravo built 12 cells or cylinders, set them next to each other in a circle, and filled them with sand and gravel. When the water in the center of the circle was pumped out, the water outside pressed on the cells, forcing them together. No braces were needed, leaving the inside clear for work. (TURN TO PAGE 52)

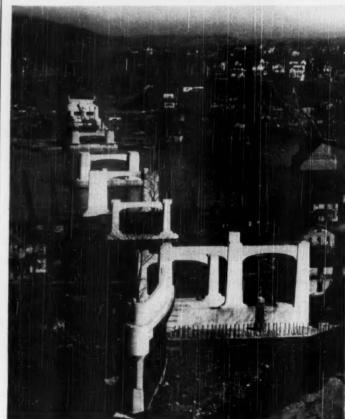




COFFERDAMS (Continued from page 51)



CURVED TEMPLATES at each end of pier will form concrete shafts to support bridge. Water-covered cell in cofferdam (upper left) is flood gate in case of high water.



COMPLETED SUBSTRUCTURE cost \$2-million, took 11 months to build. Cofferdam cells were used around the two main piers in the center of the river.

Company.

THE COLSON CORPORATION





Plenty of smart sales managers are bringing in more business even in today's tough markets—and this 26-page illustrated booklet shows you how they do it.

In a word, they're the ones who run their business on facts...not on guesswork. To that end, they make full use of the simplest and best equipment to keep those facts constantly before them, in concise and usable form that concentrates action on the points where action pays off. We think when you see it you'll agree that this new booklet shares generously the ripest, most profit-making experience sales-wise that is currently obtainable anywhere.

In short, here's a book you will use. Send the coupon today, and be one of the first to get your copy.

Remington Rand

Management Controls Div., Room 1900, 315 Fourth Ave., New York 10

Gentlemen: Kindly send me my FREE copy of your booklet KD524.

SEND FOR YOUR FREE COPY TODAY

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ZONE

Eastern's MARKETING



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PAPER can make a whale of a difference in the appearance of your business forms. Especially if it's Atlantic Bond. This fine paper is crisp and businesslike . . . makes your messages impressive and easy to read. Ask for it in White, Cream or any of twelve attractive colors. You'll be pleased with the quality - and the price.

EASTERN CORPORATION BANGOR - MAINE



PAUL WHITEMAN Teen Club is sponsored to give a 52-week.

TV Plug for More Milk Sales

Milk producers book Paul Whiteman's Teen Club TV show for nationwide campaign to promote milk consumption. Sales lag in spite of higher incomes. Lower prices don't help.

Dairy farmers have hired Paul Whiteman and TV to do a job that Mom and Pop don't seem to be up to: Get teenagers to drink more milk.

· Big Bite-It's the biggest farmerfinanced promotion drive ever put behind fluid milk. The goal is a big one. Milk producers want to check a steady decline in per capita milk consumption that has gone on for four years. They will put \$1-million on the line by fall to assure 52 weeks of the Whiteman Teen Club on ABC television.

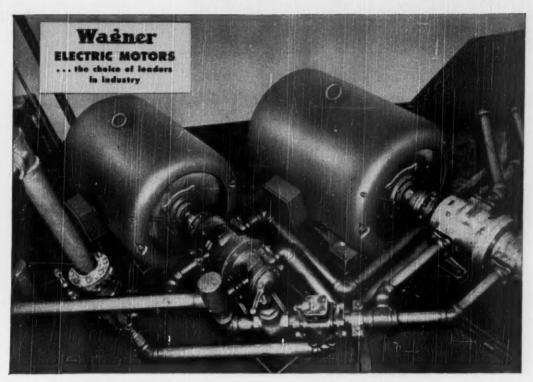
Already signed and ready to start later this month are New York, Chicago, Philadelphia, Detroit, Baltimore, Cleveland, Buffalo, and Rochester. Completing arrangements are Washington, Pittsburgh, and Cincinnati. Nine additional cities will be added by fall if plans materialize, which would bring something like 60% of the U.S. fluid milk market within range of TV cameras for a half hour every Saturday night.

· Spearhead-Spearheading the promotion is American Dairy Assn. which has headquarters in Chicago. The campaign is in addition to the advertising and promotion that ADA now supervises on behalf of all dairy products. Money for ad campaigns is raised locally by producer organizations. In the Chicago milk shed, for example, the Pure Milk Assn. had already collected a special promotion fund of almost \$60,000 without knowing exactly how

to spend it. It went into the TV spot. In New York, the Dairymen's League will sponsor the show; in Detroit, the Michigan Milk Producers Assn.; in Cleveland, the Milk Producers Federation; in Baltimore, the Maryland Coop Milk Producers; in Philadelphia, the Inter-State Milk Co-operative Assn.

Producer groups such as these have had years of tough sales experience under federal milk marketing agreements. As a result, they tend to be consumer-wise and promotion-minded. In the Whiteman show, they have a direct shot at one of their major marketing problems.

• The Plugger-Whiteman started his Teen Club in Lambertville, N. J., partly to combat juvenile delinquency. It is built around teenage performers and talent judges; the teenage audience participates. Milk producers hope the show will keep teenagers from shoving



Wagner is a familiar name behind the scenes at Weirton

Weirton Steel Company, Division of National Steel Corporation, is one of the nation's great suppliers of steel in many forms to the processors and manufacturers of the metalworking industry. Weirite, Weirzin, Weirton, and other trademarks are familiar names that mean "QUALITY — all the way through" to metal fabricators everywhere.

Wagner is a familiar name, too, behind the scenes at Weirton. Wagner Transformers help supply the power to operate the plant's equipment... Wagner Motors drive blowers, pumps, compressors and other apparatus...

and Wagner Industrial Brakes provide controlled deceleration of cranes and coke-oven machinery. The photograph above shows two Wagner 100 horsepower motors in a hydraulic skin mill at this West Virginia plant.

At Weirton, as well as in all types of manufacturing plants throughout the world, Wagner products are serving industry well — upholding the Wagner reputation for quality and dependability.

Wagner's field engineers are qualified to specify the correct motors, transformers or industrial brakes for your needs. Consult the nearest of our 31 branch offices, or write us.

Wagner Electric Corporation



Wagner Electric Corporation

ELECTRIC MOTORS - TRANSFORMERS
INDUSTRIAL BRAKES '
AUTOMOTIVE BRAKE SYSTEMS — AIR AND HYDRAULIC



for a CHAMPION MARKET...

the GUNNISON. CHAMPION. Home!

The CHAMPION Home is designed for the widest market . . . for the American millions earning \$50 or more a week! The CHAMPION Home is manufactured in the quality tradition of Gunnison Homes, Inc. . . . built for strength, for permanence! The Low-cost Quality home is easily financed . . . eligible for FHA and VA loans!

PROFIT FEATURES: Quick, easy erection (under roof in one day) • Rapid turnover • 3 sizes, many designs, 6 basic colors...ideal for large developments • High standards of quality • Greater market...greater Profit • Eyeappeal ... BUY-appeal!

Wherever There's Better Living . . .



milk aside in favor of soft drinks, coffee, and tea. American Dairy Assn. finds that among 12-year-old boys, 70% drink milk; among 18 year olds, 43% drink milk. Among girls, the decline is from 63% at 12 to 27.5% at 18.

These "lost tecnagers" are the prime target of the Whiteman show. But milk producers hope the show will get a lot of "once-in-a-while" adults back into the milk-drinking habit, too. Their theory is that the milk industry has gone about as far as it can with its traditional stress on health and nutrition. What they're looking for is a sales impact of the kind that Bergen gives Coca-Cola and Arthur Godfrey gives Lipton's Tea.

• High Income Fails—In the background is a major disappointment: High consumer income has failed to sop up the growing milk surplus. Before the war, the dairy industry thought that a higher consumer income would solve its major problems. Now, the high consumer incomes are here, but expenditures for milk have not kept pace.

Nobody expected milk consumption to climb as fast as incomes. In a time of rising incomes, the share spent for food always declines. But milk producers don't like the fact that per capita consumption of fluid milk has fallen off since the war. It's Whiteman's job to try to bend that per capita consumption curve back up.

Milk consumption per person hit its highest at 201 qt. in 1945. It has dropped off each year since. Last year,



Special for Hoarders

Hoarders will think twice before they load up on scarce items, if Ernest L. Murphy has his way. The Detroiter's idea: Use his specially designed bag (above) whenever a customer buys an oversupply of a scarce item. Then make the hoarder carry the bag from the store himself. That way, he has to brave scornful glances of all his neighbors.



It's New York Central's system-wide PACEMAKER merchandising service—saving a day on the way!

Growing! Growing! Barely four years ago, Pacemaker less-than-carload service began with one fast overnight run between New York and Buffalo. Now it links all cities on New York Central... and most smaller points, too through closely co-ordinated high-speed freight trains and highway transportation.

For Modern Merchandisers. Pacemaker service is tailored to fit today's small-inventory, high-turnover merchandising. It lets you supply outlets throughout the New York Central area ...swiftly, dependably, in any weather...from fewer main distribution points. That means big savings in overhead for you.

 put you in touch with New York Central's nearest Freight Traffic Representative... who can help you take full advantage of this daysaving merchandise service. It's a premium service at regular LCL rates that include free pick-up and delivery at most points.



New York Central

The Smooth Water Level Route



As dependable as your most trusted worker



Complete trust in the crane you buy, whether for a small shop to lift light loads or a large power plant or shop to lift 300 tons, is the greatest asset money can buy. Dependability should be the first requisite. Through more than 60 years, "Shaw-Box" cranes have earned and kept a priceless reputation for continuously good service.

Thousands of plants in many industries have put their entire belief in this dependability of "Shaw-Box" Cranes. Some of the cranes are small. Others to handle loads of more than 300 tons.

All have basically rugged construction and many modern engineering and construction features that insure, in today's "Shaw-Box" Cranes, still greater dependability, lowest cost load handling, minimum maintenance, and maximum safety.

The "Shaw-Box" line of cranes is the most complete available from one source, ranging from the smallest to the largest capacities and in all types used by industry—and, being the only large producer of cranes and hoists whose total facilities are employed to produce these products exclusively, you obtain in them today's greatest values.

If you have requirements now or in the future for cranes of any size, write for Catalog No. 217 on "Shaw-Box" Full Electric Traveling Cranes from 5 tons upward; and Catalog No. 213C for 'Load Lifter' Cranes of from 1 to 25 tons.





SHAW-BOX Cranes

MANNING, MAXWELL & MOORE, INC. . MUSKEGON, MICHIGAN

Builders of 'Shaw-Bas' Cranes, 'Budgit' and 'Load Lifter' Hoists and other lifting specialties, Makers of 'Ashcroft' Gauges, 'Hancock' Valves, 'Consolidated' Safety and Relief Valves, 'American' Industrial and 'Microsen' Electrical Instruments

milk consumption was 178 qt. per

• Price Problem?—One explanation for this 11% decline is a rise in retail prices. In 1945, due to wartime subsidies, home-delivered milk retailed at only 14.9¢ a qt. on a 24-city average. In 1949, it was up to 20.3¢.

But milk producers don't put much



EMPIRE STATE starts 217-ft. growth as



MAYOR O'DWYER drives first rivet.

A Spire Grows in N. Y.

In New York last week, Mayor O'Dwyer started construction of the Empire State Building's new television tower. Perched atop the 1,250-ft. building, the tower will add 217 ft. to what is already the world's tallest building.

TV viewers in a 52-mi. radius of the building—a potential audience of one out of, every 10 Americans—will be reached when the tower is ready to operate in December, 1950. Five TV broadcasters will transmit signals from the top. stock in this theory. For one thing, they say, the price of milk has gone up less than the price of all food. While milk prices have climbed 170% from the 1935-39 base, all food prices are up 202%. Price cuts made last year in Chicago failed to stimulate any noticeable rise in milk drinking. The price cuts varied according to the time of year, but in one period an 11% reduction brought only a 1% rise in consumption.

To ADA and the producers, this means that while milk has actually underpriced other foods, it is being outsold in the marketplace. They cite coffee consumption--up 5 lb. per capita since the war at markedly higher prices.

Milk production slumped off for a while after the war, but it turned back up last year, and it's still going up. Even the big, new-baby market isn't big enough to absorb the increased production. As a result, prices have been under pressure in the major markets. The average price in 24 cities was .4¢ lower this month than it was during July last year.

"Urgent-Higher production costs make the squeeze all the tighter. That explains why ADA found producer groups eager to try the sales promotion way out of their troubles.

MARKETING BRIEFS

Standard rate cards for TV stations were proposed by the Broadcast Advertising Bureau. BAB issued a set of recommended models.

Phillips-Jones Corp. has guaranteed retailers that it won't increase prices on Van Heusen shirts, pajamas, neckwear, and collars before Christmas, 1950. Seymour J. Phillips, president of P-J, said textile buying before the current price rise made the guarantee possible.

Ballpoint pens now account for about 14% of all dollar sales of writing instruments, according to W. A. Sheaffer Pen Co. Fountain pens take up 66% of the total business; the remaining 20% is in mechanical pencils.

More supermarkets are in sight. Some 56% of the Super Market Institute's members say they are planning to build this year, and 37% have scheduled major remodeling jobs.

Parking twist: When Stephens Parking Service opens its New Orleans garage next October, it will supply limousines to carry customers back and forth through downtown New Orleans. The limousines will have two-way radios—to tell the garage to get cars ready for returning customers.



THERE'S A HUSHED-UP STORY BEHIND THIS SLIDING DOOR

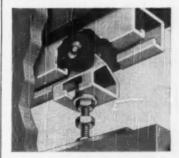
Nylon rollers operate quietly, smoothly in sliding doors, show no wear after tests equaling 50 years' use

Sliding doors like the one shown here have been hushed up. They operate more quietly, more smoothly—with far less lubrication—on rollers of Du Pont nylon plastic. In the case of this door hardware, made by Grant Pulley & Hardware Co., Woodside, N. Y., the nylon part makes up the complete outer race, or rotating member, of the ball-bearing roller.

As for durability, the nylon rollers have been subjected to tests rated at the equivalent of 50 years' use, with loads rated at 50 pounds. At the end of the test, the nylon parts showed no measurable wear!

Manufacturers are finding many related uses for these quiet, efficient nylon rollers—slides and rollers for file cabinets and stove drawers, wheel bearings for toys, carriages, light-duty industrial equipment and many others.

This is a typical story of product improvement at no extra cost, for which parts moided of nylon are proving so successful. Can nylon plastic solve a problem for you? Write today for helpful facts about this and other versatile Du Pont plastics. E. I. du Pont de Nemours & Co. (Inc.), Polychemicals Dept., Sales Offices: 350 Fifth Avenue, New York 1/N. Y.; 7 S. Dearborn St., Chicago 3, Ill.; 845 E. 60th Street, Los Angeles 1, Calif.



CUTAWAY shows nylon rollers in place on sliding door. The part is injection-molded. The ball race is machined right in the plustic, and the steel parts of the inner race are them assembled with the steel balls to form a complete ball-bearing unit.

NYLON ROLLERS molded by Arnold Brilhart, Ltd., Mineola, N. Y.; bearing assembly manufactured by The Schatz Manufacturing Co., Poughkeepsie, N.Y.





EYE-EASE' PAPER

makes the Difference!

Ends "Tired-Eye" Bookkeeping Errors

Here's the business-form paper that helps increase accuracy, decrease errors, rework, overtime.

Pale-tinted in green (nature's own comfort color!) EYE-EASE* is ruled in restful darker green and brown. Thus, it scientifically eliminates one of the greatest single causes of office-worker fatigue — eyestrain.



EYE-EASE* forms are available for nearly every record-keeping need. Try it. It costs no more.

See your stationer or write direct for National's Record Catalog. Price \$1.00, *Trade Mark Reg. U. S. Pat. Office.



MAKERS OF STOCK ACCOUNTING FORMS AND EQUIPMENT --- LOOSE LEAF, BOUND BOOK AND VISIBLE

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is non-display advertising to the active management, readership of BUSINESS WEEK, for EMPLOYMENT—BUSINESS—EQUIPMENT OPPORTUNITIES, both offered or wanted. Rate is \$4.50 per line, minimum 3 lines. Count 5 average words as a line. Box number, and handling of replies, counts as 2 words. Write "clues", c/o BUSINESS WEEK, 330 W. 42nd St., N. Y., 18, N. Y.

Topsy-Turvy TV

Price rises, buying rush make industry happy. But threat of some cutbacks in production spreads gloom.

Last week, no one in the televisionmanufacturing industry knew which end was up. The Korean situation had turned the industry completely topsyturyy.

Dealers were rushing to order television sets. And though consumer buying was still spotty in some parts of the country, it was definitely on the upswing. Some manufacturers were upping prices to meet skyrocketing prices of component parts. Most others expected to follow suit before long. On top of it all, a shortage of components and the prospect of wartime orders were causing most manufacturers to wonder how long they could keep on turning out TV sets.

• Prices Climb—Emerson started the price ball rolling last week, with the announcement that prices would be hiked \$10 to \$60. The rise wasn't really a surprise—the company had said in June that it would raise prices within 90 days.

Du Mont followed suit by upping list prices 10% (effective Sept. 1). Medium and small-sized manufacturers were expected to keep the ball rolling. Air King, Tele-King and Teletone, for example, said they would have to raise prices within a few weeks.

Some of the big manufacturers—GE, Westinghouse, RCA, and Sylvania—said they would stall price increases as long as possible. But those companies don't have as much of a parts-shortage problem: They make most of their own parts.

• Parts Short—The parts shortage has been building up for several months. Tubes, resistors, and capacitors are in particularly short supply. And supplies will get tighter as the military demands more electronic equipment.

The four-page telegram Admiral sent its distributors all over the country last week highlights the parts shortage. The company asked its distributors to be on the lookout for parts that Admiral could buy. Usually, it's the other way around, with manufacturers supplying parts to distributors.

• Red-Face Department—The unexpectedness of the Korean crisis caused some red faces in the industry. Early in July, RCA and Admiral thought they would give their dealers a break by upping discounts 2%—from 28% to 30%.

In a few weeks, they were sorry they had ever done it. Korea had caused

The World ...

is your market when you locate in the Middle South

You can reach into world markets from your Middle South plant. For interconnected transportation ties the Middle South states of Arkansas, Louisiana and Mississippi to the world via the nation's second port-New Orleans. Here exports are up 262.3%* over 1940, compared with a U. S. increase of 107.9%*. And imports, too, are up, 318.8%* over 1940 (U. S. gain 95.3%*). Private business initiative in the Middle South is sponsoring vigorous foreign trade programs to stimulate and maintain this growing flow of trade.

The Middle South is a natural meeting point for foreign and domestic materialsand factories to turn out finished goods. Easy access to both markets and materials of the nation and the world-added to regional resources of farm, forest and mine, ample electric energy, vast resources of gas and oil, and growing area markets give industry confidence in the future of the Middle South. Increasing plant investment by old and new industries is proof of this confidence. There's opportunity for you, too! Write today for more facts.

*U. S. Department of Commerce

For further information write

MIDDLE SOUTH

Area Office, 211 INTERNATIONAL TRADE MART, New Orleans, Louisiana or any of these business-managed tax-paying electric and gas service companies:

ARKANSAS POWER & LIGHT COMPANY Pine Bluff, Ark.

LOUISIANA POWER & LIGHT COMPANY NEW ORLEANS PUBLIC SERVICE INC. New Orleans 14, La.

MISSISSIPPI POWER & LIGHT COMPANY Jackson 113, Miss.

New Orleans 9. La.





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... that's only one of the things we mean by Service Plus!

• Many of our customers have told us that they were impressed with the excellent condition of our products on delivery. Customers who have visited our warehouses will tell you that factors such as temperature-controlled storage areas, proper packaging and oiling are all important in protecting products made of steel. These protective measures plus handling in the warehouse and in transit deliver Supply Company products to you in the best possible condition.

You will find "Service Plus" means other things, too. It means courteous attention from our salesmen, intelligent handling of your requirements, speed when you need it, even technical advice. Giving you "Service Plus" ... is our job.

BARS · PLATES · FLOOR PLATE · STRUCTURALS · SHEETS · STRIP · REINFORCING BARS

STAINLESS · ALLOY STEELS · ALUMINUM

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Service

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UNITED STATES STEEL SUPPLY COMPANY



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UNITED STATES STEEL

both dealers and consumers in many parts of the country to scramble wildly for sets. That meant the discounts were actually costing RCA and Admiral money, because dealers could rake in the full price for sets instead of luring the customers with a variety of comeons.

At the time the additional discounts were announced, both RCA and Admiral had valid reasons for giving them. RCA—though it is one of the hottest-selling sets in TV—needed to mend its dealer fences. The trade was buzzing that RCA distributors hadn't made themselves popular with dealers. Trade gossip said they'd been running in too many squeeze plays, like tie-ins, discrimination in supplying favored groups, and playing favorites in the use of cooperative advertising money.

Admiral's reason, too, made sense at the time. Dealers hadn't been hurrying to order the new Admiral models. They had held back to look over the new lines of other manufacturers. And some Admiral dealers complained about the appearance of the new cabinets, griped about the new 14-inch model, which is higher priced but doesn't offer any more picture area than 12 inches.

• Future: Gloomy—In spite of the present rush to buy TV sets, manufacturers aren't exactly happy. Though no one can accurately predict what will happen in the next few months, there is a good deal of gloom about the future. There have been dire predictions that production will have to be cut back—estimates range anywhere from 25% to 75%—to make room for war orders.

One encouraging voice is that of Paul V. Galvin, president of Motorola. Last week, Galvin said that in his opinion production wouldn't have to be cut back until the end of the year.

Other segments of the industry were speculating about what will happen to TV programming when production has to be pared. You can't blame advertisers for cutting back their TV budgets—or at least not upping them—if the market for the sets is cut back.

 New Stations?—Moreover, there's a very good question whether the expansion of TV into new areas isn't a dead issue for some time to come.

The Federal Communications Commission's freeze on new TV stations is still in force. FCC must first reach a decision on color TV, which it is scheduled to do in about a month's time. After that, the commission must spend months on hearings before it can allocate new wavelengths.

By that time, manufacturers may be so deep in government orders, or parts may be short, that new transmitters may be virtually out of the question. Who, wonders the industry, will want to sink money in new stations under such conditions?

PICTURE REPORT



LIGHT FOR SALE: Film-Ad Corp. has 70 searchlights, 700 floodlights to rent to gasstations, other L.A. businesses that want ballyhoo. Bargain-hunters follow the lights.



CONTROL CHIEF Mrs. Eloise Barnett and her husband run Film-Ad from a shack-like office. Vitamin pills, other medicines keep her going when business booms.

Bargain Ballyhoo in L.A.

Searchlights in the sky mean nothing more than airplane beacons in most towns. But in Los Angeles, they mean bargains. Merchants use them to lure customers for "specials" at everything from hot-dog stands to housing developments.

Part of the credit for the bargainsignal system goes to Film-Ad Corp., which sold merchants on the idea of renting the lights as come-ons. Originally, the firm started out to make educational films. But when customers stayed away in droves, the owners were stuck with a lot of equipment.

Film-Ad first rented its lights for film premieres. Later, Mrs. Barnett got local merchants to use the beams to coax customers into their shops. It's been so successful that L.A. merchants have managed to switch shopping night from Saturday to Friday.

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TAXES

Stopgap Bill Hits Opposition

Truman will get substantially what he asked for. But Congress may try to drop proposal for retroactive boosts in corporate levy. Dividend withholding also faces fight.

Truman's stopgap tax bill is running into stiff opposition in Congress. The substance of it will finally get through, but three features in particular face a fight:

 Retroactivity in the corporate tax, making companies pay the increase on all their 1950 income.

 Proposed increases in rates, which would hit lower-bracket individuals and corporations hard.

Loophole-closing provisions—particularly, the scheme for companies to withhold 10% of dividends they pay, and the plan to tax business activities of educational and charitable institutions.

So far, these objections have been confined to the closed-door sessions of the Senate Finance Committee, which is drafting the new bill. But they're sure to stir up a lot of speechmaking when the bill gets before the whole Senate—and later, the House.

For all the opposition, any softened version of the President's program that Congress writes in August will be shortlived. Next year, Truman will ask forand Congress will vote—a tougher and broader revenue law to last for the life of the crisis.

For now, Truman is asking for \$5-billion a year increase (BW-Jul.29'50, p20). That's what the bill would bring in when it's in full operation. In the period ending next June 30, however, the take under the new rates would work out to around only \$2.5-billion. Individuals would have paid the higher rates for only three quarters by then; corporations would have made only two payments on 1950 income.

The changes that Congress has in mind could reduce the take by something short of \$600-million.

• Retroactivity—The Senate may lop off \$500-million when it gets down to writing the provision for increasing corporate rates. As it stands, the new bill calls for a 25% normal tax on all companies and a surtax of 20% on incomes over \$25,000—the rates to apply to all of 1950. But Chairman George of the Finance Committee is constitutionally against making any taxes retroactive. He'd like to have the corporate hikes go into effect when the individual rates go up—around Oct. 1.

But George will have to compromise. So a likely date for the corporate jump to a 45% maximum is July 1, 1950. This would mean that the Treasury, instead of getting \$1-billion more from corporations by next June, would get only half that.

• Tax Rates—There's likely to be some rejiggering in the proposed rates on lower-bracket individuals and corporations, too. Congressmen up for reelection don't like the idea of hitting the \$2,000-a-year man with a 20% increase, while upping taxes of the \$300,000-man only \$11.9%.

The proposed rate increases, however, weren't just pulled out of a hat. What they do is simply restore the levies in effect before the tax cuts of 9% to 17% in 1945 and 1948; they're what individuals had to pay when we were running on a full war economy. If we're going back to a war economy, wiping out the earlier cuts seems like a logical step. Nevertheless, it makes for tough electioneering.

The same argument applies to the corporate increases. Under the proposed new rate structure, a company with \$5,000 taxable income would have to pay 19.05% more, as against a drop of about 8% for the \$50,000 outfit, and a rise of only 15.8% for the \$500.000 concern.

So what may happen is that Congress may take away only a part of the 17% cut on the lowest-income individuals and take more than the 9% cut from the wealthier.

To give relief to small companies, Congress may lower the 25% normal rate proposed by the President by two or three percentage points. On the other hand, the 20% surtax on income above \$25,000 may be upped a bit to even things out.

• Loopholes—Knocking out the 10% withholding tax on dividends would slice as much as \$70-million from the total take. George feels this provision puts too great a bookkeeping burden on corporations. Besides, in some cases, the tax would be collected from dividends due a small investor whose dividends might not exceed his exemptions and deductions; he would be making a kind of forced loan to the government.

BUSINESS WEEK . Aug. 5, 1950

taxing unrelated business activities of nonprofit organizations. This levy was not expected to yield any money in fiscal 1951; in fiscal 1952, however, it would bring in \$100-million.

The best bet is that this provision will be tightly drawn, so as to get only the most extreme cases of business operations of colleges and institutions.

What Is Normal?

A new excess-profits tax would run into same problem as World War II law-defining normal business profits.

If Congress tries to set up an excessprofits tax next year, it will automatically come up against one of the toughest problems in tax-making: What base do you use to determine the amount of profit that is excess and therefore subject to the special tax?

This headache cropped up again and again when the excess-profits tax of World War II was in effect. And the courts are still working on cases that arose from that law. Two recent decisions of the U.S. Tax Court show how their thinking has been running.

• Not Precise—One reason cases are still hanging fire in the courts is that the World War II law didn't give any precise definition of normal profits or excess profits. In general, it gave tax-payers the choice of figuring a base in one of two ways: (1) By averaging profits over the years 1936 to 1939; or (2) taking a fixed percentage of invested capital. (The percentage was specified in the law.) Corporations were free to choose whichever method gave them the better break.

There was lots of room for trouble in either method. Corporations don't all prosper at the same time. Also, in the case of retailers particularly, invested capital may never bear a significant relation to volume or profit.

 Guide—When it writes a new excessprofits tax, Congress almost certainly will spend some time studying the court cases that the old law produced.

The two latest cases are pretty muchtypical of the sort of problems that come up:

Case I

A wastepaper dealer in Cleveland, doing business throughout the war, elected to compute his excess-profits tax by the base-period method. Accordingly, the company reckoned its annual normal profits as equal to the average earned between 1936 and 1939.

After the war, when Congress provided for relief to companies hit un-



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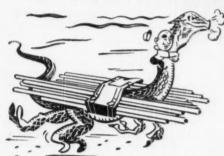
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The company based its claim on the fact that a spiteful competitor had hurt business by setting profitless prices just to harm all members of the industry. In its view, the price war was precisely the kind of "unusual, temporary economic event" for which Congress intended to provide relief.

• BIR Balked—BIR refused to grant a refund. When the case reached the Tax Court, the bureau was sustained.

The court pointed out that the price war had been going on since 1929, so it couldn't be called temporary or unusual. But the real significance of its decision was this: Regardless of the motive behind it, competition should never be considered temporary or unusual. (Winter Paper Stock Co., Inc. v. Com. 14 T.C. No. 151)

Case II

Two Pennsylvania businessmen set up a corporation, then transferred to it a steel fabricating plant they had personally bought a short while before for \$18,000-\$2,500 in cash, plus a \$15,500 mortgage.

When the transfer was made, the corporation listed the plant on its books as paid-in surplus; the mortgage was assumed as a liability.

During the war, the company elected to compute its excess-profits taxes on the invested capital method-normal profits figured at, say, 8% of capital, exerything above counted as excess.

The internal revenue code said that equity capital could be figured at full value for pur oses of determining an excess-profits ase; borrowed capital could be included at half face amount.

The way the company reckoned, capital came to \$27,400–\$18,000 in equity, the half of \$15,500 allowed for borrowed funds and \$1,650 in other assets. It paid taxes accordingly.

• Too High a Base—In auditing the company's returns, BIR decided the base was too high, billed it for \$4.000 more. BIR held the borrowed capital shouldn't have been counted.

The company appealed the assessment to the Tax Court. It claimed that one section of the revenue code permitted inclusion of property paid in as surplus while another section allowed inclusion of mortgage debt.

The court upheld BIR and, in effect, told the company that it couldn't have its cake and eat it, too. The term "paid-in surplus," the court said, must be applied to money or property, net of any obligations. The company, however, was trying to count the surplus paid in (in this case, the plant) and obligations on it as well. (Lansdale Structural Steel & Machine Co. v. Com. 14 T.C. No. 164)

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FINANCE

Rail Earnings Pick Up

Gress 1950 \$144.5 70.3 52.0 162.0 119.8	\$153.6 75.1 59.0 167.8 115.3	\$16.0 D2.2 D8.9 7.3 13.1	\$11.7 D2.5 D3.4 5.1 6.3	\$74.8 40.5 35.8 104.1 72.3	\$82.8 39.4 37.9 92.5 65.1	\$7.8 2.6 5.9	\$7.1 0:4 6.5
\$144.5 70.3 52.0 162.0 119.8	\$153.6 75.1 59.0 167.8 115.3	\$16.0 D2.2 D8.9 7.3	\$11.7 D2.5 D3.4 5.1	\$74.8 40.5 35.8 104.1	\$82.8 39.4 37.9 92.5	\$7.8 2.6 5.9	\$7.1 0:4 6.5
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162.0 119.8 20.8	115.3					*11.3	*74
20.8		13.1	6.3	72.3	453		6.00
20.8	51.4				00.1	8.4	7.0
	21.4						
229	21.4	1.7	1.5	10.9	10.4	1.1	1.0
	25.2	1.2	1.0	12.7	11.8	0.8	0.5
63.0	66.9	1.6	2.4	34.0	32.5	1.8	0.9
36.1	36.5	1.8	1.0	19.0	18.1	1.1	0.4
66.7	68.6	6.1	3.1	35.9	34.4	2.8	1.0
52.3	54.4	D3.9	D6.5	31.0	28.6	*0.9	*0.1
23.1	24.7	1.1	1.2	12.0	11.5	0.7	0.6
							1.8
12.7	13.5	2.2	2.6	5.8	6.4	*1.1	*1.4
45.3	48.2	5.5	5.2	21.3	19.4	1.1	D0.2
58.7	62.7						*2.6
45.6	46.6						0.7
72.6	73.0	4.9	2.6	35.6	34.5	3.0	2.2
88.3	100.1	4.8	9.5	56.2	55.1	8.5	6.2
47.9	56.6	6.7	9.5			4.4	3.7
8.9	12.3	1.4	1.9	6.0	6.1	1.3	0.9
113.5	124.2	1.4	4.7	71.4	66.0	3.9	2.2
47.6	50.4	2.7	1.9	28.9	25.4	2.6	0.3
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							2.6
269.8	307.9	D1.7	4.8	141.3	148.7	7.9	1.4
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*Net railway operating income; net income figure not available.

War Scare Ends Rail Slump

Even before Korea, earnings were looking better. But prospect of industrial mobilization is the main thing boosting rail-stock prices. War traffic and good tax position would swell earnings.

"Buy the rails."

That's the advice Wall Street has been chanting to clients for the last few weeks. And for those who heeded it, the advice has been highly profitable. · Strong Climb-By last week, the long lagging Dow-Jones rail-stock-price in-dex had shot up some 20% above its "Korean panic" low. It had touched a brand-new 1950 peak, at a point almost 10% higher than its pre-Korean level

By contrast, the industrial index was

only 5% above its Korean trough. It was still about 8% beneath its pre-Korean mark, and almost 10% under its 1949-50 bull-market peak. showing of the D-I utility yardstick was even poorer. Utilities were about 15% under their 1949-50 high, and almost that much below their mark-before the market break.

· History's Lesson-One factor in the rails' rise, of course, has been the improved health of rail earnings. Since April they have shown a strong uptrend

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Write for informative booklet, "Investigate Before You Calculate," Burroughs Adding Machine Company, Detroit 32, Michigan. (table, page 69); May-June profits, in fact, were often large enough to wipe out the losses that many carriers had shown in the preceding four months.

Earnings alone, though, aren't the answer to Wall Street's ballyhooing of rail stocks. Memories have stirred far more traders—memories of what happened to shares and carnings during the earlier cold- and hot-war days that started with Hitler's invasion of Poland. World War II brought:

• A jump in the annual operating revenues of Class I carriers from less than \$4-billion in 1939 to above \$5.3-billion by 1941. (Before World War II ended, annual revenues topped \$9.4-

billion.)

 A rise in Class I net earnings from \$95-million in 1939 to over \$500million in 1941 and to more than \$900million by 1942.

• A strengthening of rail shares generally. As stock holdings, rails were superior to industrials in both the pre-Pearl Harbor bear market and in the wartime bull market. Before the Japanese attack, industrials dropped 30% on the average; rails sagged only 10%. At the height of the bull market that followed the Japanese attack, rails had climbed 162%; industrials were up 129%

• Causes—The reason rails do so well in wartime—and not so well in peace-time—stems mainly from three factors: (1) the leverage that exists in the railroad business: (2) the impact of a war economy on railroad freight, passenger traffic, and other phases of operations; (3) the rails' wartime income-tax po-

• Leverage—The leverage factor comes about from the huge amount of fixed plant that the rails must always have available for use. In times of poor business, the carrying charges on this luge plant cut sharply into what earnings are available. During war booms, though, the leverage factor works just the reverse. Then the excess plant makes it possible for the roads to handle sharp increases in freight and passenger traffic, without a proportionate jump in operating costs.

ate jump in operating costs.

The truth is that larger shipments never require an equal increase in a road's transportation crews, its office staff, or in its use of fuel. For one thing, freight cars can be loaded more heavily. And regularly scheduled freight trains

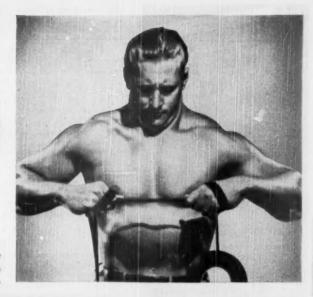
can be lengthened, too.

Because of all this, it was possible for Class I roads to carry through to net earnings almost 25% of their gain in gross revenues between 1939 and 1942. Although gross rose some 87% in the period, operating costs rose only

• Capital Structure—The rails get additional leverage from the nature of their capital structure. A large part of

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this is made up of bonds. In the past it has been normal for interest charges to sop up about 66% of the income left after operating costs. Thus once a road reaches its breakeven point, it takes only a moderate rise in the amount available for interest payments to cause a fairly sharp increase in net earnings. • Taxes-The capital structure of the railroads gives them another advantage -in taxes. The tremendous investment of the roads in plant and equipment acts as an umbrella against any warborn excess-profits tax. In the last war, the railroads were able to choose a formula under which companies could figure their excess-profits tax on the basis of return on invested capital. Thus they carried a lighter tax load than many companies whose profit was no bigger, but whose capitalization was

A return to excess-profits taxing and higher income taxes, of course, will nominally affect the railroads as much as anyone clse. Still any excess-profits tax this time will probably retain the option of computing payments on the invested-capital formula (page 65). If that's so, the tax would simply put a damper on rail earnings, rather than cut them severely.

• Traffic and Costs—A war economy would actually have a twofold effect on the railroad industry. For one, it would create a huge amount of new traffic. At the same time, it would bring curbs against sharp increases in labor costs, the railroads' most important operating expense item.

Total labor costs, naturally, might climb some, if only because more men would be needed to handle the added traffic. Last time, between 1939 and 1942, the roads' wage bill jumped about \$1-billion (from below \$1.9-billion to more than \$2.9-billion). Wage rates themselves, though, stayed within reason; in 1939, payroll costs are up 46.7¢ of each \$1 of gross revenues; in 1942, the ratio was down to 39.3%.

Contrast that with the performance in the last five years. Since V-J Day, the rails have had to put through one raise after another and to reduce the work week in some cases without cutting down take-home pay. By 1949, payroll costs were taking 51.1% of gross receipts.

Now even a 1% rise in the wagerevenue ratio would have major repercussions. Last year, 1% of the Class I carriers' total gross came to some \$86-million, or 20% of their 1949 net.

 How Strong?—The major question today is whether the railroads are in shape to handle defense traffic. William T. Faricy, Assn. of American Railroads head, says they are. Despite what outsiders may think, Faricy says, the roads are in better shape than they were before World War II. Since 1939, he reports, the railroads have spent over \$7-billion to improve their plant. As a result:

• Freight cars in service on July 1, 1950, totaled 1.8-million, 4% more than in 1939 (BW-Jul.22'50,p25). More than 600,000 were less than 10 years old, and were bigger and better than those they replaced. Aggregate carrying capacity of the fleet was 11% greater than prewar. With more cars being bought, some estimate that 120,000 to 130,000 new units will be delivered in the next few years.

 About 12,000 diésel-electric locomotives that didn't exist in 1939 are now in service. There are also 1,800 new and more efficient steam locomotives, 10,000 mi. of track with new automatic signal systems, over 9,000 miles of new centralized traffic

• No Repeat—Few Wall Streeters this time expect the rails to stage the show they did following 1939. When the climb started then, traffic was running at almost depression levels. This time, the freight cars are full already. (Sick rail earning stemmed mainly from an unstoppable uptrend in operating costs, not any scarcity of freight traffic.)

Still, a comprehensive armament program could hike freight traffic measurably, despite its present high level. It would certainly shove traffic way up if we were to run into gas and tire rationing again. This might divert back to the rails, at least temporarily, traffic hauled by trucks. Passenger business has been petering out in recent years and going heavily into the red. This trend could turn around in the months ahead. And World War II proved that once a road breaks even on passenger traffic, any addition is pretty much all velvet.

• Temporary Stop—Wall Street wonders now whether rail stocks have gone about as high as they can go under the prodding of the Korean crisis.

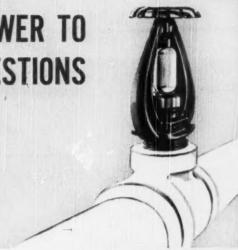
It's noticeable that even the most bullish aren't advising indiscriminate buying. Even they have become more selective in the light of the large gains already scored.

Both bull and bear, however, do expect 1950 to be much more prosperous than 1949 for the Class I carriers. The estimate now is that earnings may add up to \$600-million, or better, against 1949's \$438-million. Thus far, the most profitable rail year since the war was 1948, when the rails earned \$700-million.

The Pictures—Cover by Thomas O'Halloran, Harris & Ewing. Acme—24, 56; Int. News—23, 58; McGraw-Hill World News—92; Sid Ross—63; Wide World—22; Dick Wolters—85. A COOL-HEADED ANSWER TO FIVE "BURNING" QUESTIONS

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Q 3. THE QUESTION OF REBUILDING COSTS
— Seldom are these adequately covered by insurance indemnity to-day. Could you afford to rebuild?



Q4. THE QUESTION OF RESUMING BUSI-NESS — Forty percent of the businesses burned out by fire never reopen. What are your chances?



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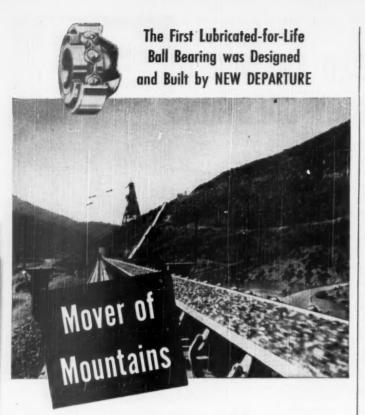
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GM at New High

First-half earnings total set record of \$485-million. Billiondollar year is unlikely because of new taxes.

No U.S. corporation-or any other private enterprise-has ever made a billion dollars after taxes in one year. The company that has come the closest is General Motors Corp., which earned \$656-million in 1949. Last week, GM reported it had earned \$485-million in the first half of 1950 alone.

That was more than four times what hefty U.S. Steel earned in the same period. It was almost \$50-million more than all Class I railroads in the U.S. earned in the whole year of 1949. For GM itself, 1950 profits represented a gain of 60% over the first half of 1949. · Billion Unlikely-With new war taxes in the offing, GM will probably have to hand over a big piece of its earnings for the whole year to the Treasury. But even if there weren't any war or any tax boosts in the works, GM probably wouldn't have hit the billion-dollar mark this year anyway. That's because it's unlikely car sales would have staved at current rates for the rest of 1950.

Anyway, GM's first half has been the biggest any company ever had. Sales hit a stupendous \$3.6-billion. During the second quarter, GM sold over onemillion cars and trucks for the first time in any quarter. Demand was strong for its nonautomotive lines, too, particularly diesel locomotives and Frigidaires. About 13.4% of all dollar sales came down to net during the first six months, compared with 10.6% in 1949.

• Good Shape-GM's balance sheet shows the effects of this kind of earning power. Ratio of current assets to current liabilities (3.55) is a trifle lower than it was a year ago (3.63). But in the meantime, GM has paid off \$125million in promissory notes. It has no other funded debt. At midyear, working capital was \$1,688,000,000, up 33% from a year ago. GM holds \$1,218-million in cash and government bonds, compared with \$746-million last year. These liquid assets would almost pay current liabilities twice over.;

Life Companies Help Finance Building Boom

A lot of the money behind the postwar building boom has been coming from the life insurance companies. The Home Loan Bank Board, which keeps figures on housing mortgages, says that life insurance companies have

more than doubled their holdings from \$3.8-billion at the start of 1945 to more than \$8.2-billion at the beginning of this year. About 73% of the \$8.2-billion was in mortgages on oneto four-family units. That's one-sixth of the total mortgage debt on these smaller units.

Life companies also held about \$3.3billion in mortgages on industrial and commercial properties at the start of the year. They held more than \$1.1billion in farm mortgages. Property mortgages of all kinds held by life companies added up to nearly \$12.7-billion or about 21% of their total assets.

Since the war, the main emphasis on new mortgage financing has been on small residential units. About 53% of all new mortgages in 1949 were on one- to four-family units, compared with 35% in 1945. Next most important were mortgages on commercial and industrial property. They took up 20% of the new building loans.

FINANCE BRIEFS

Private security sales by banks are showing up: The County Trust Co., White Plains, N. Y., just sold \$1-million of debentures to New York's Mutual Life Insurance Co. The money will help pay for County Trust's recent acquisi-tion of another bank.

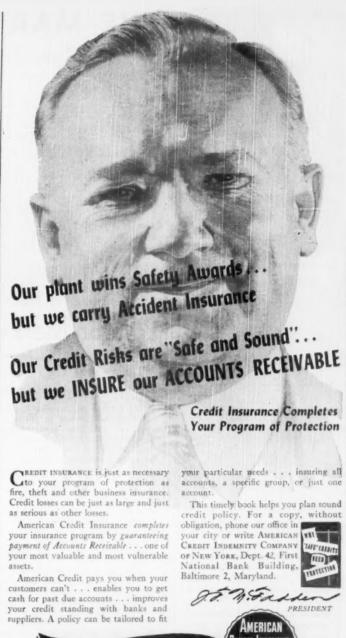
Mutual savings banks lent \$131-million on mortgages in June, more than any month since the war, says the National Assn. of Mutual Savings Banks.

The Chicago Transit Authority (BW-Jul.1'50,p56) is offering \$11-million worth of equipment-trust certificates. The issue, one of the few ever made by a municipality, is tax-exempt.

The B&O R.R. will rent 38 diesels from Equitable Life-the first locomotives leased under the Equitable plan (BW-May27'50,p96).

Stock swap: Electric Bond & Share Co., New York, asked SEC's permission to transfer its 46% stock interest in Birmingham Electric Co. to Southern Co., Wilmington, Del. Southern would give Bond & Share about 380,000 shares of its own stock (about 3% of total shares outstanding).

The ACL R.R. offered again to take over and reorganize the long-bankrupt Florida East Coast Ry. St. Joe Paper Co., owned by the Alfred I. du Pont estate, and a group of employees have also put in bids with ICC. The commission will consider the Atlantic Coast Line plan next week.







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THE MARKETS



London Market Keeps Its Head

Young bulls in London stock market avoid stampede. Stock prices are more stable than in New York and have fallen less. One reason: Korea caught London near the bottom of a deflation.

The London stock market has been behaving true to form in the Korean crisis. As usual, it's tougher to stampede than its American cousin. Stock prices in London have fallen less since Korea than they have in New York. And they haven't fluctuated so sharply (chart)

· Caught Low-London is usually a lot less volatile than New York. But that's only part of the story this time. More important, the Korean crisis caught the New York market at the top of an uninterrupted rise of more than a year. It caught London close to the bottom of a long deflation.

The bull market that started in the U.S. back in June, 1949, took a long time to cross the Atlantic. It wasn't until last March that London developed a modest bull market of its own (BW-Jun.3'50,p82). There hasn't been much time since then to build up shaky positions.

Around March, it was becoming clear that Britain's balance-of-payments position was improving fast. This was followed by successive relaxations of economic controls by the Labor government. Traders began to feel that there would be no more financial trouble this

You could sense a gradual thawing of

the "voluntary" dividend freeze observed by British companies at government request. Stocks of companies whose earnings were high in relation to dividends were gaining faster than other

· Short Fall-Korea has changed things a bit, but it hasn't hurt this bull marketas much as it hurt the American bulls. The stock market hadn't gone very high. British industrial stocks have lost only about a third of the gains they have made since March. In contrast, New York's Dow-Iones industrial average has tumbled all the way back to its mid-March level.

• Stable High-Grades-The high-grade industrial stocks have kept pretty stable, unlike their American counterparts. Aircraft stocks rose when the government announced that most of the extra £100-million to be spent on defense will go for aircraft. But even åfter this plain tip, no aircraft issue has risen more than 10%.

As in the U.S., shares of metals and other commodities have gone up-with some exception. Stocks of rubber and tin companies are depressed by the possibility that trouble in the Far East may knock out plantations and mines again.

There hasn't been any of the interest in stocks of marginal companies that

you see in New York (BW-Jul.29'50, p62). British investors figure that industrial companies that were marginal before Korea will be marginal after Korea, too. They're still buying "sound" stocks rather than the war babies.

· Bull Roar-The atmosphere in London is not unrelieved gloom by any means. You can find a lot of traders there, just as you will along Wall Street, who think that good news from Korea would bring a smart recovery in the stock market.

That's in spite of the fact that everyone accepts higher taxes as inevitable. British businessmen are saving that another excess-profits tax is surely in the cards-maybe even another capital levy

like the one in 1948. As in the U.S., the government is determined to finance the stepped-up arms program-at least in its earlier stages-without borrowing.

All this limits any long-term upward climb in stock prices. But there are many traders who think that the prospect of higher taxes isn't going to hurt stocks much more than they have been hurt already.

· New Issues Active-The market for new bond issues continues surprisingly good. Several big industrial bond issues have been heavily over-subscribed this month. It looks as if institutional investors are anxious to get everything they can now, in case the new-issues market should dry up later on.

Tax Plans Bring Rush to Tax-Exempts

Since mid-July, there has been a

boom in the municipal-bond market. President Truman touched it off when he told the nation it must prepare for higher individual and corporate tax levies. Ever since then, institutional, corporate, and individual investors have been buying tax-exempt state and city issues in gobs. And their shopping spree has left its mark on the market.

Yields: The Dow-Jones average of municipal-bond yields, which moves inversely to prices, closed last week at 1.95%. Just the week before it had been at 2.11%, a week before that, at 2.20%. This drop in yields represented a price rise during the last week of over \$30 a \$1,000 bond for the average issue in the 20-year-maturity range. That meant that municipals generally had attained about their best price level since the fall of 1947.

Supply. Bond dealers' shelves are emptying. Early this week, the so-called Blue List, which lists the municipal bonds that investment houses and banks have available for sale, was down to \$83.7-million. A week ago, there were almost \$124-million of issues listed; a month ago, the float topped \$200-million.

• Provident Buying-For the dealers, the buying rush couldn't have come at a better time. Before the Korean crisis, their shelves had been weighted down with heavy bond inventories. Besides, hundreds of new municipal offerings were slated for the months ahead. There was also the prospect that the market would have to absorb added issues from public housing authorities all over the

All this forced the dealers into price cutting to move remnants of earlier "sticky" issues. It also brought more realistic bidding for the flood of new issues that continued to hit the market. In the first half of 1950, prices slumped enough to increase the average vield of municipals about 25 basis points (4 of

• Feast While It Lasts-Most municipal-bond specialists have no idea how long the current "tax flight" will last. Instead of worrying about it, though, they are using their energy to cash in while the cashing in is good.

The trade feels fairly certain about one thing, however. The months ahead won't bring as heavy a load of new offerings as dealers figured on in June. Over the past two-and-a-half years, new offerings have been coming along at the rate of around \$3-billion annually. Only a few weeks back, people were estimating the public housing program might step up the rate to \$4-billion.

The feeling now is that these earlier estimates will have to be shaved. The defense program, most dealers think, will soon tighten supplies of manpower and materials. This, they say, will cut back the bond-financed public works programs and, at the same time, will slow down public housing activity.

If all this happens, it's quite possible that municipals will regain some of the "scarcity value" that helped send them to record highs during World War II. For this reason, many dealers believe that most municipal bonds are still "cheap," despite their big gains.

. How Good a Buy?-For the investor, the advantages in holding tax-exempts all depend upon how wealthy he is. Under today's federal tax law, if you are in the \$16,000-to-\$18,000 income bracket, a tax-exempt bond yielding 2% is the equivalent of a taxable issue offering a 3.57% return. If you are in the \$80,000-\$90,000 class, it's the equal of a corporate bond yielding 7.66%. To corporations, a 2% tax-exempt holding would be equal to a taxable investment vielding as much as 3.25%. And, generally speaking, a 2% municipal would probably prove to be safer holding than the corporates.



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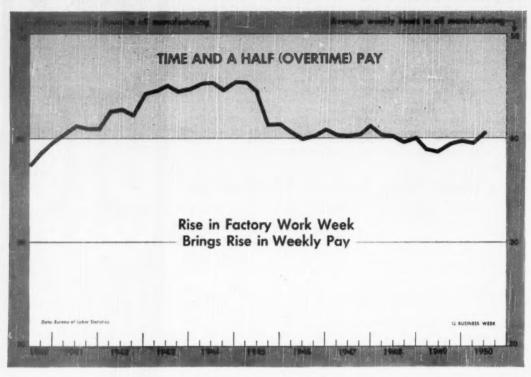
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Premium Pay Fattens Take-Home Wage

New overtime schedules are equivalent to widespread wage hikes. Workers also get bonus from canceled vacations.

The average take-home pay of manufacturing workers is on the way up again—not because of pay boosts, but because of overtime.

In June, even before industry felt Korea, the average factory work week had climbed above 40 hours for the first time since 1948. By now, it's certain to have topped June's 40.5-hour mark, even though figures to show it won't be out for four weeks.

• Record Pay—Under law, of course, overtime work means premium pay. In June, this extra cash pushed weekly earnings for the average manufacturing employee up to 558.89, a new record. The worker's pay envelope grew by \$1 between May and June. And with overtime increasing, it's still growing—even though his hourly rate remains the same.

Added to this, thousands of workers got another windfall. Plants canceled vacations. Most companies pay double time for work done during a scheduled vacation period. Some pay even more. To the average factory employee making \$59 a week, a two-week vacation canceled meant close to \$120 bonus. This, perhaps as much as the impulse to hoard, accounted for some of the soaring retail sales in industrial centers.

This week, survey by BUSINESS WEEK correspondents found conclusive evidence of an increased work pace, even though the step-up isn't general yet.

though the step-up isn't general yet.

New England. General Electric plants canceled vacations at Washington's request; many of the company's subcontractors followed suit. Textile mills, with orders for military uniforms, got ready to go on overtime shifts. Pratt & Whitney of Hartford canceled summer leaves.

Niagara Industrial Area. Bell Aircraft suspended vacations; the Buffalo Alcoa plant and Irvin Air Chute added a second shift.

New York City Area. Sperry Corp. and Republic Aviation canceled vacations. Other Long Island aircraft companies were asked by the Air Force to do the same. Consumer-goods manufacturers were increasing their labor force to meet rising sales volumes.

Pittsburgh District. Heavy industry, already carrying a capacity load, went ahead with plans for staggered vacations. Experience has taught the steel mills that they lose about 2% of production during the vacation season. They lose more, though, through work fatigue, if vacations aren't provided.

Cleveland Area. Resort business was hit hard by general vacation cancellations. The dense concentration of aircraft-parts plants around Lake Frie felt Washington's pressure immediately. Practically all medium and small manufacturing companies are already on an overtime basis. Second and even third shifts have been added whenever plants can get suitable labor. Worth noticing: Skilled workmen in their 50's, 60's, and even 70's find job opportunities plentiful.

Detroit Area. Auto plants, already working at a record clip, can hardly show added activity. All Chrysler employees were signed up to take pay in lieu of vacations anyway because of the 100-day strike. GM and Ford went ahead with staggered schedules. GM's Allison Division, however, canceled all summer furloughs. Tight steel supplies limit the amount of possible increased production even with overtime.

Wichita District. Though ready for a production increase, Wichita's aircraft plants had not felt the pressure up to this week. With the exception of Cessna, they were going ahead with

scheduled vacations.

Twin-Cities Area. Most Minnesota companies already had their vacations under way when the crisis came. One exception: Minneapolis Moline, which is going ahead with plans for an August shutdown. General Mills' big mechanical department is on a seven-day week.

Birmingham District. With vacations already on, Birmingham got caught by the crisis. One company, National Cast Iron Pipe, called employees back after one week of a scheduled two-week holiday. Another, U.S. Pipe & Foundry, shifted from a two- to a one-week furlough just as employees were about to start it. Most other companies stagger vacations, some from April to November, minimizing the summer peak.

Houston Area. No vacation cancellations reported, but reactivation of synthetic rubber and ammonia plants requires stretching the available labor force. Overtime is imminent.

San Francisco Bay Area. No signs of changed vacation plans. No reports of adding second or third shifts. Industry ready but Washington hasn't called.

Los Angeles Area. Aircraft plants are hiring but have scheduled no new shift operations. As in San Francisco, the temper is, "We're ready anytime Washington calls."

"E" AREAS, STRIKES FADE

More and more signs of a tight labor market are showing up in official statistics. For instance, nine labor-market areas graduated from the Bureau of Labor Statistics' "E" list (unemployment of 12% or more) during June. And new work stoppages dropped from 450 in May to 425 in that month.

The significance of the reduction in "E" areas is obvious: Stepped-up employment is cutting into the number of jobless workers. In the months of May and June, unemployment "distress" areas dropped from 38 to 22. At the start of the year, 43 labor-market areas reported more than 12% jobless.

A recent decline in strikes also reflects the tightening labor market. Employers are less likely to resist union demands in a period of near-full employment. BLS' June report showed 260,000 workers engaged in new work stoppages, and 2.75-million man-days of idleness.



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New Pension Law for Canada?

Parliament committee approves state-paid plan. If passed, it will clear the way for \$100-a-month program similar to those recently set up in U.S. labor contracts.

Canada probably will get a universal old age pension law in 1951—if a war mobilization program doesn't overload the Dominion treasury before then.

Terms of a proposed law, recently recommended by a joint committee of the Canadian Senate and House of Commons, would set up a broad program of federal pensions similar to the U.S. social security system. This would set the stage for contracts between employers and unions providing \$100-a-month total pensions, following the pattern recently established in the U.S.

• Up to Parliament—The joint committee recommended that Parliament authorize:

• A \$40 monthly federal pension for all persons at age 70, with no meanstest requirement.

 A \$40 monthly federal-state pension for those 65 to 70 who can prove their income isn't enough to meet minimum needs.

Under present law, a \$40 monthly pension is paid at age 70 only to those who pass a means test. The committee recommendation for revising this plan isn't binding on Parliament. But it is a unanimous proposal from a group made up of members of all parties.

• Bargaining Factor—The recommendation is the Canadian government's answer to labor-management demands for a statement of the government's intentions on pension legislation. It thus becomes an important factor in pensionbargaining for Canadian plants. Unions, particularly those affiliated with CIO, have been pressing hard for industrial pensions in Canada. Their ultimate goal is the same sort of program as that widely established in the U.S. by recent bargaining—a \$100-amonth minimum pension, including federal social security benefits. In these U.S. programs, employers make up the difference between the federal pension and the \$100 total.

Up to now, the unions haven't been able to work out such an arrangements with Canadian plant managements. The means-test rule keeps the present Canadian pension from serving as a base for U. S. type pension programs. If a worker is entitled to a plant pension in Canada now, he is automatically disqualified for government benefits—his income from the plant pension exceeds the alle wable maximum under the means-test law.

• Ford Proposal—CIO's United Auto Workers bumped into this problem some months ago in negotiations with Ford of Canada. It wanted a \$100-a-month assured pension. Ford was willing to ante up the same amount it was obligated to pay under the Ford-UAW contract in Detroit. The rest, it insisted, must come from a revised Canadian pension system—or from employee contributions. The final settlement terms set company-financed pensions at \$55 a month, beginning at age 65.

Since then, the \$55 pension has spread in Canadian labor-management

contracts. It's being talked about currently in steel negotiations between major Canadian companies and CIO's United Steelworkers. It's the Canadian "pattern" for pensions—but there's a gimmick.

Unions have warned employers: We'll sign for \$55 with the expectation that the government will pay \$40 more—to bring the total up to at least \$95. If it doesn't, the employer-financed private pensions will have to go up.

• \$40 at Age 65—Union demands to the Canadian government have been uniform: A flat \$40 a month, beginning at age 65, with no means test. They oppose the \$40-a-month-at-70 plan as "impractical" because it leaves a five-year gap between the beginning of private pensions and the time when federal payments start. When legislation goes to Parliament, they'll urge a change to an age-65 retirement time.

Many Canadian employers are actively supporting proposals for liberalized federal pensions—hoping to ease some of the private-pension pressure. The Canadian Chamber of Commerce, for instance, wants Parliament to set a \$30-a-month rate for all over 70, without the present means test. The Canadian Manufacturers' Assn. prefers a contributory program, based on insurance principles, with retirement pay depending on duration of coverage and amount of contributions.

• U.S. Law Rejected—Before deciding on the simple \$40-a-month-at-70 plan, the joint committee named by Parliament took a long look at the U.S. social security program. It vetoed such a system for Canada, reporting:

(1) Too many administrative difficulties are involved in maintaining a fund and keeping track of contributions by covered workers.

(2) The U.S. system isn't sufficiently inclusive—an additional old-ageassistance program is necessary to take care of many who fail to make enough social security contributions to earn a pension.

The committee also criticized the present Canadian plan. Members said it discourages thrift (an applicant with money in the bank can't get his pension now at age 70) and bars people over 70 from part-time employment.

• Private Plans—The committee decided that private plans (1) have an uneven effect over the working force; (2) tend to restrict the mobility of labor; and (3) to the extent that pension costs are added to the price of goods, tax the entire consuming public to provide oldage security for a limited number.

The committee agreed that the government shouldn't interfere in any way with the spread of private pensions. But it also agreed that a "floor" under private plans would ease many of their "objectionable features."

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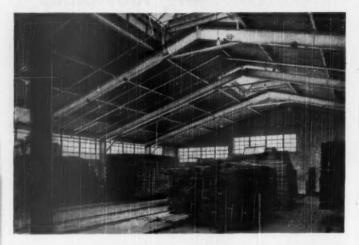
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If war spreads, it's fairly sure old War Labor Board will be revived. All-public board lacks union support.

What kind of a war labor board will we get this time-if mobilization reaches the point where we have to settle labor disputes without strikes or lockouts?

If present plans go through, the National War Labor Board of World War II will be the pattern for the next board. The three-way partnership of public, management, and labor representatives will be kept intact.

· Semiofficial-Planning on that basis is going ahead in the National Security Resources Board under the direction of Fred A. Krafft, former industrialrelations head of American Viscose Corp. and Midvale Co. Krafft served as industry representative on World War II boards in Philadelphia and Washington. A lot of those helping him also had a hand in the old NWLB. They're generally agreed that NWLB did a good job-and should be revived when needed.

· Opposition-Krafft's ideas, though, don't jibe too well with some of the thinking in Washington. Secretary of Labor Maurice Tobin, for one, favors a three-way board, but wants it in his Dept. of Labor, not as an independent agency as before.

Tobin argues that "practical considerations" dictate that a new war labor board be a part of his department-for general housekeeping purposes if not for policy and decision making. He points out that NWLB's successor, the National Wage Stabilization Board, operated in the Labor Dept. from 1946

Industry has already shown that it opposes putting the war labor board in the Labor Dept., which is considered partial to labor unions.

• Public Board-One proposal that has been gaining ground lately is to make the board strictly a government body. Management and labor shouldn't participate in the decisions since, the argument goes, they can combine to outvote public representatives.

As yet, little support has been built up for an all-public board. But more will be heard about it. One of the chief advocates is Vincent P. Ahearn who headed the industry side of the NWLB. He is a member of the Industrial Relations Committee of the National Assn. of Manufacturers. NAM may back him in calling for an allpublic board.

· Unions' Stand-For their part, the unions oppose an all-public board. They already have gone on record with a demand that labor be allowed to participate in war-labor-board decisions. And they want the same status in other mobilization or war agencies.

The unions, though, have another reason for opposing an all-public board: Such a board would have to be created through legislation; this would lead to compulsory arbitration—something that might be hard to get rid of after a war emergency.

Definite plans for a board will be ready in a matter of weeks. But it's not likely that a disputes-settling agency will be set up unless the country is dragged considerably further into the war.

Atomic Mediation

AEC's labor-relations panel has hot record in atomic plants, but it faces toughest test in dispute between supplier and UE.

The government's Atomic Energy Commission has its own mediation machinery for labor disputes: the Atomic Energy Labor Relations Panel. Ever since it was set up—by presidential order in April, 1949—the panel has successfully kept the heat out of atomplant labor strife. But this week, AELRP faces what may be its toughest test so far. The dispute is not in an AEC plant but in an AEC supplier's plant. And it involves the left-wing United Electrical, Radio & Machine Workers (ex-CIO).

• Pumps Clogged—Atomic Energy Commission rules bar UE from representing workers in atomic-energy installations operated for the government. But UE has contracts with many companies on the atomic-energy tringe—such as suppliers of equipment going into the AEC's plants.

One of these is Ingersoll-Rand Co., which makes pumps and compressors for atomic installations at its Philipsburg, Pa., plant. UE struck the Philipsburg plant a month ago, stopping all production there.

Last week, AEC called on Ingersoll-Rand to resume work on atom-plant equipment. It also called on local UE officers to send strikers back to work on only the "urgent" AEC order. This would require the return of 30 of the 2,600 strikers for less than two weeks.

• Local Overruled—Philipsburg UE officers pledged cooperation. But inter-

officers pedeged cooperation. But international officers of the left-wing union overruled the local. They persuaded a small group of strikers to repudiate their officers' limited return-to-work orderand to back an all-out strike.

The rebuff doesn't bother AEC greatly as far as its own operations go. The commission plans its business with



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suppliers so that strikes won't hurt it. It splits orders up and places them far enough in advance so that "alternative sources" can be used. It's not the parts shortage, which would be slight, but it's the principle of the thing that concerns AEC. The UE rebuff calls for a

precedent-setting policy decision.

• Enter AELRP-If AEC decides that action is necessary in the dispute, it can -and probably will-use the Atomic Energy Labor Relations Panel. The presidential order which set up AELRP under William H. Davis didn't limit its work to atom plants only; the panel can intervene as well in supplier labor disputes that threaten to interfere with atom-plant work.

The only real difference is that suppliers and their unions-unlike atomplant management and labor-aren't bound to avoid strikes until the panel acts. In most cases, AELRP must work in supplier cases solely in the role of mediator.

• High Average as a Mediator-The panel so far has been batting right around 1,000. For instance, two major labor contracts at Oak Ridge, Tenn., ran out more than a month ago. But there's been no strike-and no real threat of one, even though the two disputes involve fairly militant AFL and CIO unions. The reason? Same as in 10 other cases which have come up in the last 16 months: quick on-the-spot action by AELRP.

The two Oak Ridge disputes involve the K-25 gaseous diffusion plant and the X-10 National Laboratory, both operated for the government by Carbide & Carbon Chemicals Corp.

The CIO Gas, Coke and Chemical Workers contract at the K-25 plant expired June 9. At the laboratory, the AFL agreement expired June 30.

· Rivalry-Complicating the settlement is the rivalry between the two unions. Each wants to gain as much as, if not more than, the other union in the new contract. Last year, the CIO settled for 8¢-an-hour general wage increase, without aid of the panel. Later, the AFL, with panel aid, had to settle for the same amount, but it was put on a percentage basis so as to preserve pay differentials.

Again the CIO is demanding a general wage increase. It also wants an increase in severance-pay allowances. Because of what it regards as the uncertainty of the duration of jobs in atomic energy, the union stresses severance pay as against pensions. The union is cool to a company offer of a pension plan. Most workers have been with the company only a few years. It will be a long time before they are eligible for a pension

The CIO dispute has been given a hearing by the panel and the panel has intervened in the AFL dispute.

Texaco Truce

Oil workers go back a Texaco refineries, ending 4month walkout. Company hasn't yet met union pension demand.

One of 1950's longest strikes ended this week-at least temporarily. Members of the Oil Workers International Union (CIO) went back to work at Texaco for the first time since Apr. 4.

The CIO refinery workers quit their

jobs last April after contract talks bogged down. The walkout closed plants at Port Arthur and Port Neches. Tex.; Casper, Wvo.; and Lawrenceville and Lockport, Ill. Most of the plants reopened in late June, using supervisory employees and a few returned strikers. • Truce-Last week, with production moving up steadily, company and union got together to talk settlement terms. They agreed that the 16-week walkout should give way to a 60-day truce to let negotiations "go forward in a more fav-orable atmosphere." The company dropped disciplinary dismissals and suspensions against 13 employees. Both

company and union withdrew suits. The agreement on a truce doesn't settle any contract issues-but company and union say there is now a "basis' for a negotiated settlement.

Original union demands, handed to Texaco last October, appeared harm-less at first. OWIU didn't ask for a wage increase, or anything that would mean an additional direct money payment to workers. Instead, it asked for changes in the pension program and in accident and sickness benefits.

· Stickler-The stickler came later: The union said the changes must be incorporated in a national agreement on pensions and insurance covering all Texaco plants.

The company interpreted this to be a step toward a demand for a national contract covering all employment terms. According to Texaco, this would be impractical because each plant has a different set of basic work conditions.

The union denied that it was laving the groundwork for a national contract. Still, Texaco replied it would talk pension and insurance changes only on a plant-by-plant basis, as it always did.

Disagreement on this point snarled bargaining for nine months.

· Bargain Buster-For other employers, the Texas case is a good example of the difficulty of handling a labor dispute that doesn't involve a give-and-take bargaining issue. Economic issues can be negotiated by compromise. But where a noneconomic issue is at stake, it's hard to find ground for a settlement without a complete give-in by one side.



PAUL M. HERZOG heads NLRB again.

Herzog Stays; Denham to Go?

The National Labor Relations Board isn't going to get a new chairman after all. For six months, Paul M. Herzog stuck to plans to return to private life when his NLRB term ran out this month. But when the time came, he accepted renomination by President Truman. Truman urged that he stay because "the Korean crisis is with us" and NLRB is sure to face many tough problems.

Washington, though, thinks there is more to it than that. His acceptance, say the rumors, means that NLRB General Counsel Robert N. Denham won't stick in his job after the first of the year. Denham and Herzog disagree sharply on many Taft-Hartley law interpretations.

LABOR BRIEFS

The Donnell bill to ban rail strikes and lockouts died last week (10-1) in the Senate Labor Committee.

Sex equality in industrial plants appears at least another year away. A bill ordering equal pay for women doing the same work as men has been O.K.'d by the Senate Labor Committee, but a companion bill is still tied up in the House Labor Committee.

A profit-sharing plan just announced by Cleveland Pneumatic Tool Co. divides up to 50% of profits among employees. They collect one-third in cash; the rest goes into a trust fund and is payable on retirement or on leaving the company.



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INTERNATIONAL OUTLOOK

BUSINESS WEEK AUGUST 5, 1950



There's still hope in Washington that Stalin may settle in Korea.

This slender thread is spun from two ifs:

- (1) If Moscow won't send Chinese or Russian forces;
- (2) If U.S. troops can turn the tide against the North Koreans.

Washington figures that if we can hang on and then go on the offensive, Stalin might step in as peacemaker. He might even agree to pull back to the 38th parallel. Then the U.S. would achieve its objective. Stalin meantime would make propaganda hay with his peace bid.

But Washington is soberly reckoning with two other possibilities:

- (1) Moscow could push ahead in Asia or Yugoslavia—without openly committing Soviet forces. Chinese Communists or Balkan satellites would carry the ball.
- (2) All-out war might come in Europe and/or Asia in the next few months. This could flow from the momentum of events, even though the Kremlin has no battle plans right now.

Stalin has overplayed his hand in the United Nations Security Council.

He won't get-his hoped-for split among the western powers, no matter what his U. N. tactics may be. Though Britain and Norway have recognized Red China, they aren't going to bat for its admission to the U. N.

Nor will the West accept any quid pro quo: A Korean cease-fire for a Chinese Communist seat at Lake Success.

But despite defeat in the council, the Russians seem ready to stay put this time—no walkouts.

The U.S. is ready to uncork veto after veto at the U.N.

The U.S. delegation is dead set on keeping the initiative we took when South Korea was attacked. We won't give the Russians'a chance to break up the western nations—either now or at the General Assembly in September.

Moscow thinks it has Korea pretty well sewed up.

So the Soviet planners are envisioning a stepped-up neutrality drive in Europe and Asia, eventually forcing a giant Munich on the U.S.

At the same time, they'll plump for an "Asia for the Asians" campaign: All Asia's problems must be handled by Asian countries and no one else. This is what's behind the Korean "peace plan" reportedly offered by Communist China this week.

Using Nehru for the "peace" campaign didn't work out so well for Stalin.

Reports from Delhi indicate that the Indian prime minister is mighty upset by the way Stalin twisted his mediation offer.

From now on, the Russians won't get much more than a very passive neutrality out of Nehru. And another Soviet aggression is pretty sure to throw him completely into the western camp.

But count on Nehru to support Communist China's bid for U. N. membership. He's too Asia-for-the-Asians-minded to block it.

Nor has the Soviet "peace" drive gone over very well in the U.S.

Stalin consistently seems to miscalculate the "peace" sentiment in the U S

Now American Communists have orders to emphasize the "sacred-

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK AUGUST 5, 1950 right-of-revolution-against-imperialist-war" line. Evidently, Moscow still has hopes that it can mold a potent fifth column in the United States.

More reports are filtering out of East Germany about the Communist party congress in Berlin two weeks ago:

Soviet delegates Suslov and Pospelov told the faithful that World War III is a strong possibility within three to six months. But they added that the Politburo hopes for Communist rule in Europe and Asia without a major war.

Meanwhile, European Communist leaders were warned to get their parties on a war footing immediately (BW-Jul.29'50,p75).

Russia still hasn't cut off supplies of critical materials to the U.S.

Last week, the Soviet ship Krasnador put in a surprise appearance at Baltimore carrying 6,700 tons of chrome ore. And about 10,000 tons of Russian manganese ore arrived there July 4. That makes 17,100 tons of manganese, 25,290 tons of chrome from Russia since the first of the year.

Apparently, the Kremlin wants to keep some ties with the U. S. Or else it's an attempt to confuse us. $lack \bullet$

Franco may finally get his loan from the United States.

By voting \$100-million to Spain, the senators have tossed the Administration a hot potato it's been trying to dodge ever since the war.

Truman and the State Dept. would have much preferred a strictly business Export-Import Bank Ioan. Now Congress has gotten politics mixed up in it.

Chances are the U.S. will have a full-fledged ambassador in Madrid by fall—the first since December, 1946. But he'll go only after the U.N. General Assembly lifts its blackball of Spain.

Now Franco is telling Spain it can't stay neutral in World War III.

President Truman's extra \$4-billion arms-aid program shapes up something like this:

- (1) Atlantic Pact nations—and any other European country deemed strategically important—will get \$3.5-billion. (This leaves the door open for Spain, if the Administration wants.)
 - (2) The Far East is down for \$303-million.
 - (3) Greece, Iran, and Turkey will get \$193-million.

Arms and arms-making equipment can be bought anywhere.

But much of the buying will be done in the U.S. And since usable stocks of military supplies have just about disappeared in the U.S., almost all the money represents new business.

It will take up to two years to get all the equipment off production lines. So orders must be placed pronto.

But there are some qualifications: Arms manufacture in Germany and Japan will be limited to the items O.K.'d by the occupation authorities.

There's a danger of inflation tied up with increased arms production in Europe.

It's bound to make Marshall Plan aid more—rather than less—necessary.

Increased food shipments will be needed to sop up the extra cash lying around Europe after factories start operating full blast.

BUSINESS ABROAD

State Dept. Is Due For a Louder "Voice"

U.S. wants to spend \$89million to counteract Communist propaganda and tell its story to the world.

Over the radio, from street-corner soapboxes, and through the press, international communism is drumming these "facts" into the heads of millions of people the world over:

 American soldiers are shooting Koreans in Korea.

• French soldiers are shooting

Indo-Chinese in Indo-China.

British soldiers are shooting

Chinese and Malayans in Malaya.

• The Russian parliament has ratified the "Stockholm Peace Pledge," branding the first nation to use the atomic bomb as an aggressor.

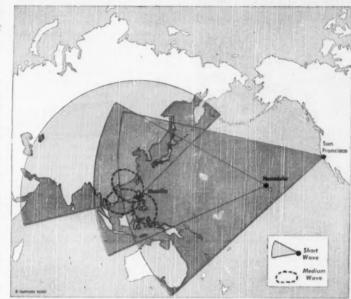
 U.S. Steps In—The U.S. has finally decided that it must enter the war of words with a stepped-up propaganda campaign of its own. And that campaign is going to cost a lot of money.

Nobody knows how much the Communists spend on their huge propaganda effort. But it's estimated that they spent \$30-million in Italy alone last year. Contrast that with the measly \$46-million that the U.S. State Dept. had last year to spread the American story all over the globe.

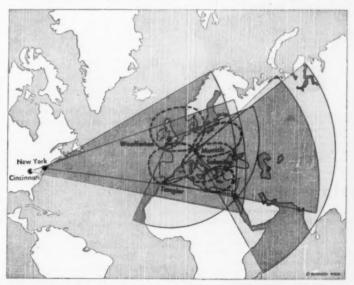
The situation may be different before long. Last week, after eight days of hearings before the House Appropriations Committee, State Dept. officials rested their case for \$99-million in additional funds. The committee seemed impressed. If the request doesn't get lost in the legislative shuffle over the Korean crisis, the U.S. may at long last start using ideas as weapons.

· State's Troubles-Since the war, State's International Information & Educational Exchange program has suffered from chronic bickering with Congress, an able but badly organized staff, and, above all, from lack of money. Little effort has been made to follow that basic business adage: Tailor the product to the market. Latin Americans and Chinese, farmers and industrial workers all heard and saw about the same thing from the State Dept.-when they were exposed to any U.S. propaganda at all. No effort was made to use propaganda to set the stage for major moves in foreign policy-which polished Russian propagandists always do.

• U. S. Program-Today, the U. S. propaganda effort consists of these proj-



EASTERN TARGET: Every day, the Voice of America blankets the Far East with seven hours of news, music, features about the United States. As many as six languages are used—from Indonesian to Russian.



WESTERN TARGET: Europe and the Near East hear from the Voice, 18 hours a day in 18 different tongues. Besides targets in East and West, there are four hours of programs each day for Latin America.





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will help America's business executives - the readers of BUSINESS WEEK - then tell them through the

Business Services.

Just write Classified Division. BUSINESS WEEK, 330 W 42nd St, NY 18 ects: about 200 hours of short- and medium-wave radio broadcasts a week, some 70 libraries and information centers in 50 countries, a film program that will attract an audience of about 115-million persons this year.

In addition, there is a sizable program of exchanging professors, students, engineers, and the like with foreign countries, and a rather meager press and special informational service to embassies and information offices abroad. • It Wants to Do More-If it gets an

O.K. from Congress, State will expand each of these operations. But the expansions won't be helter-skelter-they'll be tailored to the needs of the 28 countries in Europe and Asia where com-

munism's line is strongest.

State's radio network, the Voice of America, is in line for the biggest chunk of the \$89-million request. The objective will be to remove the two biggest obstacles to the Voice's effectiveness: too few programs; and Russian inter-

ference (jamming)

• The Voice-The Voice broadcasts on short wave from 38 transmitters in the U.S. and is relaved on short- and medium-wave from stations in Honolulu, Manila, Japan, Wooferton (England), Munich, Tangier, and Salonika, But the network broadcasts only 200 hours a week, compared with the British Broadcasting Co.'s 666 hours and Russia's 502

The greatest tribute to the Voice's hitting power is Stalin's feverish effort to see that his subjects don't listen. U.S. monitors have identified 250 individual transmitters being used by the Russians to jam the Voice and BBC broadcasts. But there are ways of getting around jamming:

(1) Increase the strength of the signal. Almost half the new money that State wants for propaganda purposes will go for new transmitters to do this.

(2) "Cuddle" close to regular Russian radio channels, so the Russians have to jam their own programs in order to iam ours.

(3) "Blanket" a given area by transmitting the same program from a lot of

transmitters at once

• The Big Job-The Voice's biggest job is behind the Iron Curtain, where it's the only medium left that reaches those who dare oppose the Communists. In the peripheral areas-from Japan around to Western Europe-the Voice has a smaller part in the over-all schedule of U.S. propaganda. The number of receivers in the backward parts of the Middle East and Southeast Asia is insignificant; and in Western Europe, as in the U.S., few persons want to chase back and forth across the short- and medium-wave bands to find an official foreign broadcast

Nevertheless, hitting the peripheral countries is important; there, the hotcold war is still in doubt. So State's radio men hope to step up their rebroadcasting privileges over local net-

• Films-Documentary films have been more effective than radio in the countries outside the Iron Curtain. Films are just about the only way that you can reach the masses of illiterates that make up the bulk of the population in many countries. More money is needed badly for new films and sound tracks to put existing films into the vernacular of the countries State wants to reach. (Subtitles won't do if the audience can't

Right now, State only gets about 100 new films each year. About 70 are donated by other government agencies, business firms, or social organizations. The rest are bought from private docu-

mentary film producers.

State's films are solely for educational purposes-entertainment is left to Hollywood. Many are highly technical, English-language films for use in colleges, hospitals, and other professional institutions. Some are travelogues of the 48 states, or stories about typical U.S. workers that are designed to arouse interest abroad.

But films, like radio, have definite limits as a propaganda medium. You can only hit selective audiences with

them.

Answer-Words-Actually. printed word and education are the best ways to tell America's story to mass audiences. This is primarily the job of State's Libraries and Institutes Division and of the Educational Exchange (Fulbright scholarship) program.

In the past, USIE libraries have only been equipped to serve professional people-professors, government analysts, and students. Virtually all the libraries were limited to foreign capitals or one or two of the larger cities. The country-

side got no service at all.

In the past year, State has been gradually broadening its library services. And it would like to do more. In Iran, for example, there is one USIE library in Teheran. State would like at least two more, in the cities of Tabriz and Meshed, near the Soviet border,

· Important Phase-One of the most important and least talked-of-features of State's information program is the drive to use more local groups-labor, farm, and business organizations-to promote closer ties with the U.S. The best example is State's sponsoring of binational cultural organizations.

State wants money enough to get more of these societies started. And State's experience in Latin-America indicates that the local groups gradually assume their operating costs once they get going. U. S. business firms operating abroad would be other natural backers for the cultural groups.



 Northwest Airlines' aloha to old style, premium-priced enamel papers meant a great deal more than just good-bye to higher cost. Before any saving could be considered, it had to mean that Northwest's annual reports, employee magazines, and other printed materials would maintain the highest standards of quality and attractiveness.

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IN TUNISIA:-Workers tap the desert for water, using U.S. equipment.

France's African Plans Boom

Since war's end, France, aided by ECA money, has been pouring capital into development of its African Empire. Now it's beginning to pay off.

PARIS-ECA's economic invasion of French Africa is rolling along in high gear. Just recently, new credits of nearly 54-million have been earmarked for African development, bringing total Marshall Plan spending there to more than \$60-million. That means more U.S. machines and equipment in French Africa-and an added boost to France's elaborate schemes for developing its African empire.

The latest grants will go into: (1) roadbuilding projects in French West Africa, French Equatorial Africa, and the French Cameroons; (2) exploitation of the rich Conakry iron mines in French Guinea; and (3) Algeria's big soil conservation program.

• Big Plans—The French hope for big things to come from their vast African territories. The French flag flies over some 47-million Africans, living on 4.3-million sq. mi. of land stretching from Morocco to Madagascar. But its largely an underdeveloped area. So, ever since the war, France has been busy developing power facilities, ports, highways and railroads, public works, health, education, housing, forestry, mines, agriculture, cattle raising, fisheries.

Private businessmen and the French government have been doing the work hand in hand. In Morocco, for example, 471 new joint stock companies were set up during the first nine months of last year. That represents an investment of some 12-billion francs (\$35-million). The money went into food industries, tanneries, cement and brick plants, textile mills. Already, 330 of the new concerns have boosted their invested capital.

• Ten-Year Plans—The government has been encouraging investment at every turn. Right after the war, France adopted a new formula for its African lands, permitting each territory to frame an individual long-term program for economic development (BW—Mar. 27'48,p117). Many of the programs are in the form of Ten-Year Plans. Rolled into one, they call for a whopping investment.

ECA money comes into the picture whenever one of the new companies—or a big public works development—needs U.S. equipment. ECA head-quarters in Paris allocates the dollars to the project, for use in the U.S. ECA also gives the O.K. for the use of counterpart funds (francs which the French have to deposit to match the Marshall money) to supply equipment and labor that can be bought locally.

• The Lion's Share-French West Africa-10 times the size of France, half as large as the U.S.—has been getting the lion's share of investment funds: It's absorbed over half the ECA money allotted to French Africa.

Biggest project in West Africa is an irrigation development. It's in the southern Sahara where the Niger River is joined by several other rivers. This river delta is being transformed into a vast 250,000-acre rice paddy. And new lands are being brought under cultivation at the rate of 12,000 acres each year. In 1949, the new paddies turned out 22,000 tons of rice. The French hope for 140,000 tons by 1957. That will turn French West Africa, which had to import nearly 50,000 tons last year, into a rice-exporting area.

Keystone of the project is the big Sansanding Dam. It's more than a mile wide, backs up the Niger and diverts it into a network of canals 50-mi. long on either side of the river. Optimistic French engineers think that eventually 660,000 acres can be brought under

cultivation.

• Peanut Project—West Africa's most important agricultural industry—peanuts—has received a liberal transfusion of ECA dollars. U. S.-made earth movers, farm tractors, disk harrows, even mechanical peanut pickers have gone to work to create more than 18,000 new peanut acres in the past three years. The project seems to have paid off better than Great Britain's stumbling attempts at African peanut culture (The Groundnuts Scheme, BW—Nov.19'49, p128). In 1949, peanuts and peanut oil accounted for 45% of French West Africa's total exports.

But the largest single item on the West African budget is roadbuilding. The French expect to pour around \$90-million into roads by 1952, another \$111-million by 1960. ECA is providing a good part of the heavy equipment—so far, around \$10-million worth.

 Roadbuilding—Roads are also getting top priority in French Equatorial Africa. Equatorial Africa, which is about five times the size of France, stretches 2,200 mi. into the interior. Two-thirds of its population live deep in the interior,





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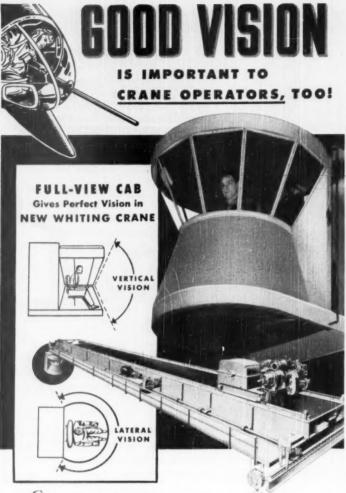
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fenced off from the coast by a 500-mi.deep barricade of jungle. There are only a few hundred miles of modern roads.

To cut up the jungle, ECA has sent large quantities of equipment: 40 heavy tractors, 40 bulldozers, three mobile machine shops, three gravel plants, 25 dump trucks, plus steamshovels, rock crushers, motor graders, root cutters, destumpers—the whole range of machinery for rugged roadwork. In addition, ECA has supplied equipment for the territory's chief port, Pointe Noire, and 19 diesel-electric locomotives for its ramshackle railroads.

• Diamonds—Diamonds are getting a big play in Equatorial Africa. ECA has signed commercial contracts with the French government aimed at boosting diamond production for the U.S. stockpile. Already, \$2.2-million in dollars and counterpart funds have been made available—repayable with interest in industrial diamonds for the U.S.

· Cameroons-U.S. dollars have a big part in France's plans for the Camer-oons, the pre-World War I German colony now held by France under a United Nations trusteeship. More than S1-million has gone into logging operations in the jungles. This year, the Cameroons expect to start earning foreign exchange from the sale of rare tropical woods, never before produced in quantity. Mahogany output will be stepped up, too-thanks to U.S. aid. • Iron Ore-The rich iron ore reserves on the Conakry peninsula, in French Guinea, have already soaked up a lot of Marshall Plan money. Half-a-million dollars have gone into a pilot plant to experiment in refining the ore and for other mining equipment. And the recent authorization for another half-million will help the French reach their goal of 1.2-million tons yearly by 1952. · Minerals-Northern Africa-more industrialized than the rest of French

Africa—is a beehive of activity. Prospecting teams, working out of Algiers and Oran, are scouring the Sahara for copper, manganese, iron ore, phosphates, lead, and, of course, water. Existing mines are busily modernizing their facilities. And there's a full-scale oil hunt on. More than \$1-million worth of U.S. drilling and testing equipment has recently been made available for the search.

• Cement—North Africa's cement industry is expanding by leaps and bounds. Algeria and Moroeco are becoming nearly self-sufficient in cement. Tunisia should be able to start exporting it this year in considerable quantities. All told, \$689,000 of ECA funds have gone into North African cement. Lend-lease and interim aid worth more than \$2-million got the cement industry started several years ago.

• New Industry-Thanks to ECA aid, a brand-new industry has just started pro-

ducing near Casablanca. It's an American-equipped plywood plant that will turn out 300 cubic meters each month, half for export. The plant will backstop Morocco's reforestation project, which has already replanted 75,000 acres of woodland. And it will provide an outlet for the new lumber production getting under way in the Cameroons. • When ECA Dwindles-The French are thinking about the day when EGA aid will begin to peter out, and private investment will have to take the place of intergovernmental credits. In the past few months, the French African Committee of the International Chamber of Commerce has been beating the drums for more international understanding of France's work in Africa, so that capitalists the world over will see the limitless field for investment there.

BUSINESS ABROAD BRIEFS

Turnabout: Now a British firm has set up a factory in the U.S. Astral Equipment Ltd., Glasgow, is assembling refrigeration machinery at a plant in New Jersev.

A study of Cuba, backed by the World Bank, gets under way this week. Experts from Stanford Research Institute, Armour Foundation, and Southwest Research Institute will probe Cuban finance, industry, agriculture, labor, and foreign trade. There's no talk of a loan—yet.

Diesel-electric locomotives—45 of them—will be shipped to Thailand. Davenport-Besler Corp., Davenport, Iowa, is building the engines, Westinghouse the electrical equipment.

Now you can send a plow to your farmer friends in India and Pakistan. CARE, Inc., has a new "plow package," containing a special, one-man wheel plow for Asia's small farmers. The cost: \$10.

An export bank is planned for Japan. When it's approved, the bank will give yen credits to hard-pressed Southeast Asia countries that want to buy Japaneše.

A carbon black plant—wholly owned by Boston's Godfrey L. Cabot, Inc.—is now operating in England. Its annual output, 10,000 tons, will save British \$1-million each year. In the past, the British have depended on U.S. imports of carbon black, which is a vital reinforcing agent for rubber tires.

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Assess American Angest Car.	Agency - Frank I

GUNNISON HOMES, INC	56
HERCULES POWDER CO. Agency—Fuller & Smith & Ross, Inc.	84
HORNBLOWER & WEEKS	70
THE INDUSTRIAL COMM. OF	. 92
Agency—Noutheastern Adv. Agency INTERNATIONAL HARVESTER CO Agency—Young & Bubicato, Inc.	18
KEASBEY & MATTISON CO	86
Agency—Geare-Marston, Inc. KIMBERLY-CLARK CORP.	11
Agency—Foote, Cone & Belding KOPPERS, CO., INC.	. 83
Agency—Batten, Barton, Durstine & Osborn & 188EY-OWENS-FORD GLASS CO. Agency—Fuller & Smith & Ross, Inc.	. 12
LURIA ENGINEERING CORP. Agency—Richard & Co., Inc.	82
THE MAGNAVOX CO	. 72
MANNING, MAXWELL & MOORE, INC	. 58
METROPOLITAN LIFE INS. CO	. 27
MIDDLE SOUTH AREA Agency—Dixie Advertisers	61
AINNESOTA MINING & MFG. CO Agency—Batten, Barton, Durstine & Osborn	71 Inc.
NATIONAL BLANK SOOK CO. Agency—Susherland-Abbett	60
NEBRASKA RESOURCES DIV	. 63
NEW DEPARTURE DIV	74
GEN'L MOTORS CORP. Agency—J. M. Hickerson, Inc.	-
NEW YORK CENTRAL SYSTEMS	57
NORTON CO. Agency James Thomas Chirurg Co.	44-45
PACIFIC INTERMOUNTAIN EXPRESS Agency—Brisacher, Wheeler & Staff	30
PARSONS PAPER CO Agency - Wilson, Haight & Welch, Inc.	. 40
PITNEY-BOWES, INC. Agency—L. E. McGivena & Co., Inc.	. 34
DI ACKONI DILL LIBORY CHIEFLE FORD	47
GLASS CO. Agency—Meldrum & Fewenith, Inc. RECORDAK CORP. (SUB OF	
Agency - J. Watter Thompson Co.	35
REMINGTON RAND, INC	. 53
REPUBLIC STEEL CORP Agency - Meldrum & Fewsmith, Inc.	. 17
REYNOLDS METALS CO. Agency—The Griswold-Eshleman Co.	93
REZNOR MFG. CO. Agency - Meek & Thomas, Inc.	. 76
ROBBINS & MYERS, INC	. 79
BOSS CARRIER CO	. 77
ST. PETERSBURG CHAMBER OF	
COMMERCE Agency—Griffith Adv. Agency	. 80
SANTA FE RAILWAY. Agency—Leo Burnett Co., Inc.	. 46
STATE OF FLORIDA	51
UNITED GAS PIPE LINE CO.	. 33
Agency Bozell & Jacobs, Inc. U. S. STEEL SUPPLY CO. Asency Batten, Batton, Durstine & Osborn.	- 62 Inc.
VEEDER-ROOT, INC.	. 3
WAGNER ELECTRIC CORP. Agebry—Arthur R. Mogge, Inc.	. 55
WARREN WEBSTER & CO. Agency William Jenking Adv.	28
WESTINGHOUSE ELECTRIC CORP. (ELEVATOR DIVISION) Agency - Fuller & Smith & Hoss, Inc.	
Agency - Fuller & Smith & Ross, Inc	. 5
WHITING CORP. Agency—The Fensholt Ca.	94
CHAS. H. WILLING & CO. Agency - Frank Best & Co., Inc.	76

Why We Need a New Secretary of Defense

It has been said of Louis Arthur Johnson, Secretary of Defense of the United States of America, that he hoped for the best without preparing for the worst.

The brutal facts from Korea bear tragic witness to the awful truth of this estimate of the man.

Even if a Dunkirk can be averted and our offensive can be mounted from South Korea instead of Japan, a horrible failure here at home must be accounted for. The time is now to ask the question why so few had to face so many with so little.

Who is to blame for the Korean tragedy? Who left us hopelessly unprepared to meet this murderous Communist aggression? Who lulled the nation into a sense of false security by boasting of our growing military might under reduced military budgets?

The blame must be shared by every American, not least by the President and the Secretary of State. But the chief blame belongs where the chief responsibility is with the Secretary of Defense.

Louis Johnson should resign. If he fails to show that sense of public duty, the country should make it plain to him.

Three Failures

The Secretaryship of Defense is a high office of public trust that should seek out the man who is to fill it. No such narrow view, however, trammeled the ambitions of its present occupant. From as far back as 1940, when FDR had to back away from an earlier promise to make him Secretary of War, Louis Johnson campaigned to be this country's top military civilian.

His chance—a long one—came in the summer of 1948 when Democratic candidate Truman was apparently prepared to promise anything to anyone who could replenish the bankrupt party treasury. Johnson took over, according to widely accepted reports, on the condition that he become Secretary of Defense. He did a miraculous job of political money-raising, the President was reelected, the bargain was kept, and in March 1949, Louis Johnson succeeded the late, great James Forrestal.

His administration of the Defense Dept. has been stormy—perhaps unavoidably so. He inherited the whole stubborn unification mess. He has done good work on the administrative side in making unification work. And he has brought about some legitimate, badly needed economies.

It is a pity that his good works pale into obscurity alongside his calamitous failures.

First, Johnson has had no adequate conception of the defense policy needed to match the foreign policy of this country, wobbly as that has been. To be sure, the blame here extends beyond him to his commander-inchief, the President, and to the Secretary of State as well. But his was the responsibility to lay before Congress a military program equal to our commitments. He failed to do so.

Second, Johnson's department failed to provide the kind of military strength that Korea shows we need. There has been a consuming preoccupation with intercontinental atomic war and inadequate preparation for the satellite cat's-paw type of war that Russia chose to use in Korea and may use elsewhere. The result is that our men have only a few light, outgunned tanks to oppose the Red monsters thrown against them. We must rely on jet fighters to do work they were never designed to do in support of ground operations. The new weapons about which so much was heard last spring seem still to be on order.

Third, Johnson's repeated assertions that his economies and budget cutting have resulted in a stronger defense are revealed as tragically false. Before Korea, he prated that "we're in grand shape," that if Russia "starts something at four o'clock in the morning" we would go into action by five, and that we were prepared to "lick the hell out of Joe Stalin" if he started anything.

He told the country that his smaller budgets would merely cut out fat and convert fat into muscle. After holding defense obligations below the \$13.9-billion authorized for fiscal year 1949-50, he submitted a \$13-billion budget for 1950-51. This compared with the \$18-billion figure Forrestal regarded in 1948 as the minimum for meeting our responsibilities around the world. We are now hastily—and wastefully—in one year trying to expand the defense budget by twice that \$5-billion "saving."

Johnson's budgeting went far beyond cutting off fat. It cut down Army ground force strength, almost decimated the Marines, shrank Navy fighting power, held back the 70-group Air Force, reduced aircraft replacement programs, ignored glaring weak spots in tanks and tactical aircraft, and retarded research and development.

Cutting the Muscle

On the floor of the House of Representatives on Apr. 4 last, Chairman Carl Vinson of the House Armed Services Committee challenged Johnson's propaganda. Said Vinson, "I want to state emphatically that, in my judgment, Mr. Johnson's economy scalpel has not only carved away some service fat but has cut—deeply in some areas—into the sinew and muscle of the armed services."

An example, tragically documented in Korea, is what happened to Forrestal's tank-modernization program. The plan was to take our medium tanks, rearmor and regun them so they could at least handle their Russian opposite numbers. GI's in Korea today could hardly be expected to agree that Johnson's economy in budgeting that program out of existence was only cutting off fat.

Louis Johnson's record does not qualify him to continue as the civilian leader of our great new military effort. Nothing he has done in office would so become him as the leaving of it.





Tean Seques Kousseau on education for citizenship

There can be no patriotism without liberty, no liberty without virtue, no virtue without citizens; create citizens, and you have everything you need; without them, you will have nothing but debased slaves, from the rulers of the State downwards. To form citizens is not the work of a day; and in order to have men it is necessary to educate them when they are children.

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